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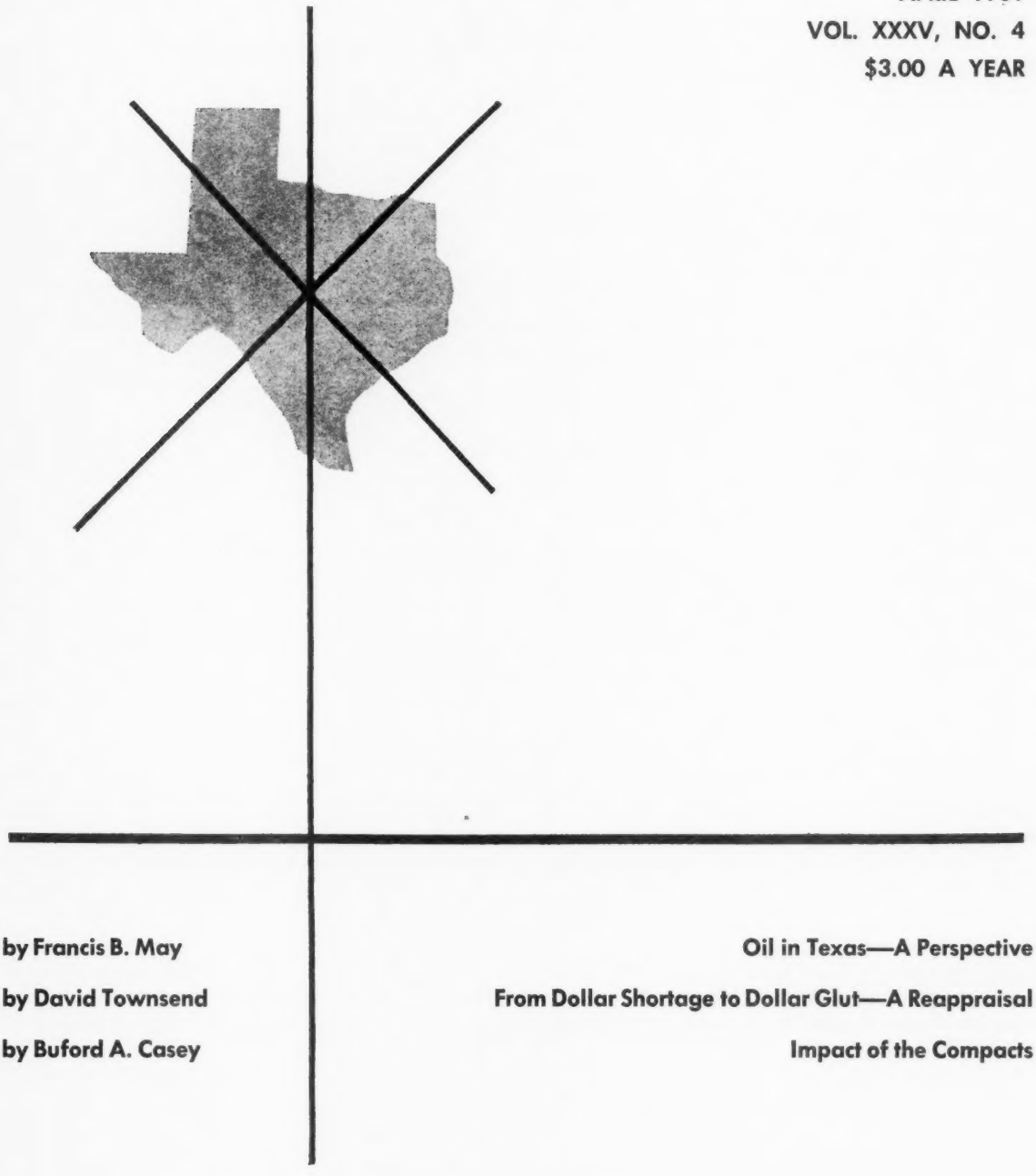

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The Business Situation in Texas

By JOHN R. STOCKTON

Texas business for February gave a fairly definite indication that the decline that has been under way since the middle of last year may be coming to an end. The index of business activity retained the gain it made in January and remained unchanged at 230. The average for the first two months of 1961 was at the highest point reached by the index since May 1960, when it stood at 235. The index of business activity reached its peak in the second quarter of 1960 with an average of 229, declined to 226 in the third quarter and to 222 in the last quarter. The low point of the index for the current recession was in October with a value of 213 for the index. The rise to 226 in November and the holding at that level for December were encouraging trends. With the two values of the index of 230 for the first two months of 1961, it appears that the turning point in the decline was reached in January or February.

It should be emphasized that there has been no substantial recovery shown in Texas business, and some of the barometers registered declines in February. But when all of the factors are considered, the conclusion seems to hold that the turning point has been passed. A further analysis of the major factors will be given below.

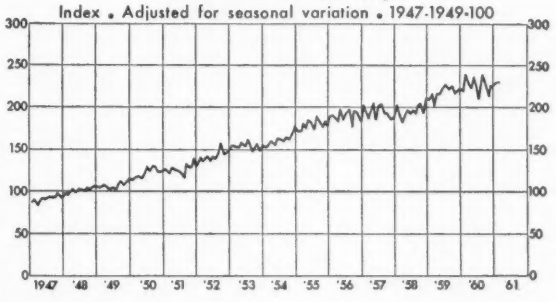
At this point it is extremely difficult to make any reliable forecast with respect to the speed with which improvement may take place. It is rather unusual for recovery to move the major indexes up rapidly at first; a much more common pattern is for the improvement to proceed very slowly for a few months. During these first few months of recovery there is always danger that some unforeseen occurrence will bring the recovery to an end. In view of the very strong supporting forces present in the Texas economy, however, it does not seem likely that such a situation would develop, but there is actually no insurance that it will not. Most predictions are looking for the third quarter of 1961 to show the first strong recovery, although it is expected that the second quarter will show some improvement over the first. At the present time it appears that the last quarter of 1960 or the first quarter of 1961 will be the low point of this recession.

The level of consumer spending is one of the important stabilizing factors in the present decline, although total personal income in the United States dropped slightly in February. Retail sales in Texas remained practically unchanged during February after adjustment for the normal seasonal variation between January and February. In comparison with February 1960, spending declined 5%, which gives an indication of the extent of the decline registered in the current recession. In January 1961 the level was 4% below a year earlier.

In comparison with January, sales of durable goods stores registered no appreciable change. Automotive stores remained unchanged, which is the normal seasonal pattern for February. Furniture and appliance stores declined 11%, while a decline of 9% is considered normal for February. Lumber, building material, and hardware stores increased 3% between January and February, although the normal seasonal change is to decline 1%. This means that after adjustment for seasonal variation the sales of this group of stores registered an improvement.

Sales of nondurable goods stores have been much more stable during this decline than have sales of durable goods stores. In February they were at the same level as a year ago, and only 1% below January 1961. Apparel stores, general merchandise stores, drug stores, food stores, and the miscellaneous group declined less than seasonally. Service stations showed an increase of 15% instead of the normal 4% decline. In comparison with a year ago apparel stores, drug stores, and eating places declined while food stores and service stations increased. General merchandise stores remained unchanged from a year ago.

Texas Business Activity



An important factor in the recession of the past year has been the decline in durable goods. Automobiles have received the most publicity in connection with the recession, but the slowing down in this type of consumer spending has been pronounced in other durable goods lines.

February sales of durable goods stores were 15% below the level of last February. For the first two months of 1961 sales of durable goods stores were 11% below the same period of last year. Automotive stores reported a 19% decline from February of last year, furniture and appliance stores a decline of 13%, hardware stores 10% decline, and lumber and building material dealers 8%. Only farm implement dealers registered a gain over February of last year. For the first two months of 1961 farm implement dealers reported an increase of 5% over last year. This trend in Texas coincides with reports from other parts of the country that farmers are expanding their capital expenditures.

If business is to make a definite upturn during the coming months, an improvement in the automobile industry is almost a requirement. All indications point in this direction, so it is assumed that the remaining months of 1961 will show a strong improvement in the sales of automobiles.

Industrial production in Texas during February declined 2% after adjustment for seasonal variation. This series does not as yet support the conclusion that the bottom of the recession has been reached, since the February index failed to maintain the gain registered in January, when it rose two points. However, durable goods manufacturing remained unchanged from January, which had registered a rise of five points from the preceding month. Nondurable goods production had risen three points in January but dropped four points in February. These fluctu-

ations may be summarized as not showing any definite support for the belief that the decline has stopped, but the divergent movements lead one to suspect that the forces of the decline have probably about run their course.

In this connection the change in industrial production for the country as a whole is significant. This barometer is closely geared to the fluctuations in total business and reflects changes very quickly. The index compiled by the Board of Governors of the Federal Reserve System declined less than one-half percent in February. This appears to have

SELECTED BAROMETERS OF TEXAS BUSINESS

Index	Feb 1961	Jan 1961	Feb 1960	Percent change: Feb 1961 from Jan 1961	Percent change: Feb 1961 from Feb 1960
	(1947–49=100)				
Texas business activity	230	230	238	**	— 3
Miscellaneous freight carloadings in S.W. district	71	73	80	— 3	— 11
Crude petroleum production	109.4	109.9r	119.2r	**	— 8
Crude oil runs to stills	153	153	148	**	+ 3
Total electric power consumption	395*	386*	383r	+ 2	+ 3
Industrial electric power consumption	380*	357*	399r	+ 6	— 5
Bank debits	276	275	284	**	— 3
Newspaper advertising linage	158.6	166.3	176.6	— 5	— 10
Prices received by farmers (1910–1914=100)	249	251	240	— 1	+ 4
Urban building permits issued (1957–59=100)	97.3	101.3r	94.6r	— 4	+ 3
Residential (1957–59=100)	79.9	82.8r	91.3r	— 4	— 12
Nonresidential (1957–59=100)	116.1	129.1r	101.6r	— 10	+ 14
Total industrial production	170	173	173	— 2	— 2
Average weekly earnings, manufacturing	177.7	178.7	174.1	— 1	+ 2

Adjusted for seasonal variation, except annual averages.
* Preliminary.
r Revised.
** Change is less than one-half of one percent.

marked the end of a decline that has run with only slight interruption since January 1960. Total industrial production reached a peak in January 1960 and in February 1961 had declined 8% for the 13 months. Durable manufacturing did much worse with a decline of 15%, while nondurable goods declined only 3%. The fact that all segments of the industrial production index showed a much slower rate of decline in February gives an indication that the worst of the downward movement is over. The decline has been surprisingly mild in this important barometer and to a considerable extent has been concentrated in the automobile industry. Forecasts of improvement in the sale of cars may, therefore, be considered an optimistic factor in the situation. The increased rate of production and employment at Texas assembly plants is concrete evidence of the impact of this industry on the economy of the state.

The decline in the production of automobiles affects a widening circle of industries that supply the automobile industry. Steel is, of course, one of the most important of these sources of supply, and the rate of operations of the steel industry will improve with an increase in automobile production. Increased orders for steel and rising prices of steel scrap, an important raw material of the industry, are indications that the recession has reached its low point in this key industry. The index of steel production in the United States rose 8% in February and stood 18% higher than the low point of December 1960. Both of the Texas steel mills have been increasing production and are calling employees back to work.

Another factor that is important for the longer term view of the business situation is the progress of the interstate highway program. The Bureau of Public Roads reports that Texas has completed 879 miles of the program, has 1,426 miles under construction, and has 718 miles on which no work has been done. Financing of the program has been running into trouble, and there is danger that some cutback will be necessary. It has been predicted that instead of the system being completed by 1973 there may be a delay of as much as five years in completing the program. However, if one is willing to assume that the funds will become available, the mileage under construction in Texas is a favorable factor in the long-term business situation. In Texas 47% of the total interstate mileage is under construction, compared with 35% for the United States.

Building construction shows some signs that the decline may be nearing an end. This slight amount of optimism is similar to the situation in other major segments of the economy, but, when considered in connection with other barometers, it substantiates the conclusion that the low point of the recession probably has been reached. It does not appear that construction at the present time is offering any substantial support to an improvement in the general level of business, but there are signs that such support might be forthcoming within the next few months.

Total new construction authorized in Texas during February declined 10% from January. Even allowing for the fact that February regularly shows a seasonal decline from January, this decline was enough to depress the index 4% after adjustment for seasonal variation. The decline occurred in both residential and nonresidential construction authorized. The seasonally adjusted index for nonresidential construction dropped 10%, but the drop in residential construction was somewhat less than 4%.

Although residential construction made a better showing in February than was made by nonresidential, the latter has held up better in the year-to-year comparison. Nonresidential construction for the first two months of 1961 was 14% higher than in the same period last year. During the same period residential construction authorized declined 12%. The greater relative strength of nonresidential construction has been a conspicuous characteristic of the conditions in the building industry in Texas.

There appear to be signs that some upturn in residential building might be expected this year. In part this optimism comes from reports of improved sales of houses, but there is no strong indication that any major improvement is under way. February data for the six largest metropolitan areas in Texas shows a mixed trend for February in comparison with a year ago. Austin, Dallas, and Fort Worth showed declines in the number of one-family housing starts. El Paso, Houston, and San Antonio registered gains but not enough to offset the larger declines in the other three cities. The total number of one-family housing starts in February 1961 was 9% below February 1960.

Prospects for farm income in 1961 appear favorable at this time. Although the index of Texas farm prices declined one point in February, the trend of prices has been upward for the past year. The average for the first two months of 1961 was 5% above the same period of last year. Although it is too early to forecast crop conditions for the year, in general they are favorable, although the spring has been late.

Oil in Texas--A Perspective

By FRANCIS B. MAY

The number of successful oil wells drilled in the United States in 1859 was exactly one. It was punched down to a depth of 69.5 feet by a combination of primitive water-well drilling techniques and sheer determination. When digging by hand proved infeasible, a steam boiler and 6 horsepower steam engine were utilized. When the walls of the drill hole caved in, lengths of soil pipe were used as a lining. When, after two months of hard work, oil was discovered, the stockholders were jubilant. Oil was worth $20 a barrel, and the well produced fifteen to twenty barrels a day.

"Colonel" Edwin L. Drake is regarded as the founder of the United States oil industry. He was certainly an innovator of the practical kind whose success stories form an important part of the folklore of business enterprise in this country. He was willing to try anything that offered a reasonable prospect of success, and he never gave up. However, his contribution was of a special kind. He did not provide the demand for oil. Instead, he found a way to satisfy a growing demand for petroleum that had previously been satisfied by gathering oil flowing to the earth's surface at oil seeps. It was the existence of a growing market at $20 a barrel that provided the incentive for drilling in order to tap the underground reservoirs of petroleum.

In 1859 oil was used as an illuminant. Whale oil was becoming scarce and dear. A lamp oil of good quality at a lower price was needed. Oil distilled from coal was smoky and malodorous, but it cost less than the $2.00 to $2.50 a gallon demanded for whale oil. Oil distilled from crude petroleum was better, but the supply was limited. Colonel Drake solved the problem of supply.

Success of the first well attracted a host of emulators. In 1860, 240 wells were drilled of which 201 were productive. Most of these wells were drilled in the Oil Creek area near Titusville, Pennsylvania, site of the Drake well. Production increased from two thousand barrels in 1859 to the unheard-of total of 500,000 barrels in 1860. Value of production leaped from $40,000 to $4,000,000. The foundations of great fortunes were laid. A flood of cheap kerosene washed away the foundations of the whale oil industry. Boston, Bedford, and other famous whaling ports began to search for other sources of revenue.

Petroleum produced from the Pennsylvania wells was ideal. It was almost as if it had been designed by nature to suit the crude refining techniques of the day. It was of low specific gravity, free of sulphur, and contained a good percentage of kerosene. Being a paraffin base crude, it could be used to make good lubricants by the methods then known. If it had contained hydrogen sulfide, asphalt, and some of the other undesirable compounds present in more recent discoveries, it would have been of little value. Development of the industry would have had to wait improved refining methods.

J. C. Booth, of Philadelphia, designed the first distillation unit intended for use in fractionating crude oil. It was a simple pot still fired with coal. Vapors driven off by the heat passed through a small water-cooled coil. A few gallons of condensate were produced each day. It was the prototype of much larger units shortly to be built.

William Barnsdale and William H. Abbott built the first new refinery designed to operate with crude oil subsequent to the Drake discovery. The still was fired for the first time in January, 1861. It was followed by numerous other refineries constructed in or near metropolitan centers. By 1866 there were 58 refineries in Pittsburgh, 30 in Cleveland, and numerous others along the East Coast. Productivity of workers in these early refineries was low; the services of 200 men were required to process a scant 250 barrels of oil a day.

The Initial Period of Growth and Expansion: 1865–1899

The Civil War was followed by a period of rapid growth in investment, population, and industry temporarily interrupted from time to time by cyclical downturns and "panics." Railroads spanned the nation. Population followed the rails. Vast, empty spaces began to fill with cities, people, and new industry. A heavy tide of immigrants helped to supply the need for more and more labor.

Expansion in the oil industry accompanied and, at times, outstripped this rapid national growth. Initial success with the Drake technique led to rapid improvements in sinking wells several hundred feet to deeper petroleum reservoirs. Primitive exploration methods were sufficient to lead to important discoveries in various states. By 1865 producing wells had been drilled in Kentucky, New York, Ohio, Tennessee, and West Virginia. Total production in 1865 amounted to 2,498,000 barrels valued at an average price of $6.59 a barrel at the wellhead. A river of money was flowing from 1,611 producing wells, and there was no end in sight.

Oil prospecting during the last half of the 19th century consisted of searching for oil seeps and "trends." Early prospectors noted that big wells and oil pools lined up in trends with a general northeast-southwest orientation. Oil pools tend to line up parallel to the grain of the rocks. Another good well can frequently be found along the trend from a successful discovery. In 1883 the theory that oil pools were to be found on geological structures termed anticlines was confirmed by discoveries in West Virginia. It was an enormous forward stride. For the first time, prospecting took on the aura of science.

Much of the oil from early discoveries was hauled to the refinery in wooden barrels or tank wagons, a slow and expensive mode of transportation. A few short pipelines of wrought iron pipe were constructed, but it was not until 1874 that the first trunk pipeline was constructed. Owned by the Columbia Conduit Company, the 3-inch line ran 60 miles from the oil fields to Pittsburgh. It carried 3,500 barrels of crude a day to the refineries.

Progress in refining during this period consisted of per-

fecting techniques of building larger stills. Booth's early still was simply a small, air-tight kettle. Heavy boiler-plate iron was used to construct stills of first 10–15 barrel capacity, and then to hold 100 or more barrels. Eventually "cheese-box" stills of as much as 1,000 barrel capacity were constructed. These stills were cylindrical, with a domed top to concentrate vapors and a double curved steel plate bottom.

Distillation was a batch process. After the still was filled with petroleum, the temperature was gradually raised. At a temperature of 180° F., light products of Pennsylvania Grade crude began to vaporize. Sometimes the still temperature was raised as high as 1,000° F. to remove the last vestige of liquid from the hard, carbon residue called "coke."

Gasoline and light naphtha were the first products to condense during the distillation process. They were too volatile and explosive for lamp oil. Disposal of these unwanted by-products was a troublesome problem. Frequently they were run into pits and burned. Kerosene, lubricating oils and wax were the valuable products of the process. After several batches of crude were distilled, the still had to be cleaned of its residue, a time-consuming and expensive job.

In the late 1870's a continuous distillation method came into use. It resulted in larger throughput and increased efficiency of operation. Oil was passed through a series of shell stills connected in sequence. Light oil fractions were removed by vaporization in the first still. Heavy fractions were removed in the last still. This method was steadily improved during the remainder of the century with consequent reduction in refining cost.

Toward the end of the century two important inventions were made. In 1876 a practical four-cycle gas engine was developed. In 1879, George B. Selden applied for the first patent on a vehicle propelled by an internal combustion engine. The automobile industry was incubating. By the end of the century it was fledged. In 1899, total value of motor vehicles produced amounted to $4,390,000. Total value of horse-drawn vehicles and accessories was $55,640,000. These figures include only those vehicles used by general consumers. Value of motor vehicles used for business purposes was zero. Production of horse-drawn business vehicles was valued at $32,544,000.

Oil in Texas: 1901 to 1919

While other more fortunate states were experiencing the economic benefits that flow from rapid development of oil deposits, Texas citizens were arduously wresting a living from the soil and the saddle. Cotton and cattle were the mainstays of the regional economy. There was a little excitement around Nacogdoches in East Texas when a well drilled near Oil Springs Branch produced 300 barrels in a day before a drop in pressure made pumping necessary. Wells drilled in the area between 1887 and 1890 produced about 4,000 barrels. This was not enough to provide the basis for an important industry. Eventually production from the shallow reservoir ceased.

Efforts to find oil in other parts of the state met with limited success until a firm of luckless water well drilling contractors discovered the Corsicana field in 1894. A contract had been entered into to drill a water well for the city. At 1,035 feet oil appeared. The reaction of the city fathers was of dismay. It was water, not oil, that was needed. Doggedly drilling for another 1,013 feet and setting casing all of the way, the contractor finally reached a stratum of pure water. During this period, three drilling rigs were destroyed by fires resulting from careless spectators smoking amidst the inflammable fumes and liquids oozing from the drill hole. The contractor was almost bankrupted.

Several Corsicana citizens formed a partnership to drill for oil in 1895. They brought in a well which flowed about two and a half barrels a day. Other wells were drilled in the general area of the now famous water well in 1895 and 1896. Average production per well was only a few barrels a day. Aggregate production for the state was 1,450 barrels in 1896. By 1897 it had reached 65,975 barrels. Oil sold at an average price of 68 cents a barrel in that year. Total Texas production in 1897 was worth approximately $38,000 at this price.

Success at Corsicana encouraged exploration. In 1900 the Powell field was discovered, raising total production in Texas to 836,000 barrels worth about $1.19 a barrel. Since the Corsicana field was located on a fault line, most exploration was for trends along these lines. No one suspected that the salt dome formations along the Gulf Coast of the state might be oil traps until Captain Lucas proved otherwise at Spindletop.

Pat Higgins was convinced there was oil under Spindletop, a hill near Beaumont. Three attempts to drill a well failed because of the inadequacy of the light equipment used. A fourth attempt by the Hamill brothers, drilling contractors from Corsicana, under Captain Lucas' direction was a spectacular success. Shortly before 10:30 on the morning of January 10, 1901, an ominous rumble came from the depths of the well. At 10:30, mud, oil, and seven hundred feet of drill pipe used by the heavy rotary rig erupted from the earth with a wild roar. Oil spewed higher than the crown block of the derrick. In nine days the well flowed 800,000 barrels of oil, an amount about equal to total production in the state the previous year. Total production in 1901 was 4.4 million barrels worth about 96 cents a barrel. This was 6.3% of total United States production.

In 1901 the largest producing states were the following:

State	Annual production (Thousands of barrels)
Ohio	21,648
West Virginia	14,177
Pennsylvania	12,625
California	8,787
Indiana	5,757
Texas	4,394

Source: American Petroleum Institute, *Petroleum Facts and Figures*, Centennial Edition, 1959, pp. 40–41.

Texas was sixth of a total of fourteen producing states, excluding some with minute production. Today it has the largest production of any state.

The Lucas gusher flowed oil worth about $780,000 in nine days. This was the kind of return on an investment likely to attract attention. Wildcatters flocked into Beaumont, a town of 9,500. Sites large enough to construct a drilling platform sold for as much as $10,000, even after the flood of oil had reduced the price per barrel on the local market to a very low figure. Texas has not been the same from that day to the present. The indestructible legend of the Texas oil millionaire was born at Spindletop.

In order for a great industry to develop, there must be not only a source of supply of great quantities of raw materials but also a large and rapidly growing market; both conditions existed in the case of the oil industry. America was a rapidly growing, rapidly industrializing country during the years between the turn of the century and the end of World War I. The demand for energy was soaring as more and more machinery was used to supplant human and animal labor. Oil and its refined products were high in energy content, easily processed, and, being liquids, were easily transported in pipelines. Tremendous growth occurred.

During the years from 1901 to 1919 other important oil fields were discovered in Texas. The Electra field in 1910 sparked a North Texas boom. Burkburnett in 1913 and Ranger in 1917 both created great excitement. In 1918 the Panhandle oil and gas field which proved to have an area of 2 million acres was discovered. It contained enormous quantities of natural gas. An interesting feature of this field is that the gas contained enough helium to make its extraction worth-while.

Important advances in the technology of the industry were made during this period. In refining, the use of pipe stills and improved fractionating towers were significant developments. Pipe stills passed crude petroleum through tubular heat exchangers rather than the old fashioned kettle-like shell still. The process was continuous and utilized heat much more efficiently. Hot gases from the still passed into a fractionating tower for selective condensation of the light fractions. Heavy fractions collected at the bottom of the fractionator and were redistilled. During this period the old-fashioned fractionators, which were simply hollow columns, were replaced with insulated towers with baffles which increased the selective ability of the towers, permitting more control over the composition of end-products.

In exploration scientific methods were adopted in place of the former practice of relying on folklore or pure chance in deciding where to drill. Mapping of geological structures such as synclines, fault lines, and salt domes was resorted to in order to locate regions that should be explored. Although the ultimate test of any promising area is by pushing a drill bit down to the presumed petroliferous stratum, geological mapping increased the proportion of producing wells to a significant degree. "Creekology" was a thing of the past as far as the major operators were concerned. A few of the hardy breed of incurable optimists known as wildcatters often used magical devices that were supposedly attracted by oil, but this group was slowly dying out.

Drilling and production methods were improved during 1901–1919 in many ways. Better and stronger drill pipe, and more powerful pumps and engines were used. The rolling cutter bit, rotary drilling rig, and other currently used devices were used and improved during this phase of development.

More important than any of these events was the rapid acceptance of the automobile as a means of transportation. In 1901, 4,192 passenger cars worth $4,899,000 were manufactured. No motor trucks were made in that year. Not until 1904 was motor truck production begun. In 1919, 1,651,625 motor cars worth $1.4 billion were manufactured. Approximately 225,000 motor trucks valued at $371 million were made. As a result of this progress in the automobile industry, a large and growing market for gasoline and special lubricants was created. In time it would grow to be the principal market for refined petroleum products.

Boom and Bust: 1920–1940

After a brief but severe postwar depression which wiped out many small businessmen, including a completely unknown haberdasher and ex-captain of artillery named Truman, the decade that was to be known as the "Roaring Twenties" began with a mild business recovery. In Texas it is remembered by oil men as the year the Westbrook and Mexia fields were discovered. Westbrook was not a large field. It is notable chiefly as the first oil discovery in West Texas. Mexia was more important. It was located on a fault line which led oil prospectors to the Luling, Powell, and new Corsicana fields. During the year of their peak production, 1924, these fields produced more than 59 million barrels of oil.

The peak of a minor cycle in business activity in the nation was reached in 1926. To many an unfortunate real estate speculator, it was the year that the "Florida bubble," a wild spree of speculation in Florida sand and palmetto-covered real estate, burst. Texas oil men remember it as the year they discovered the big one in West Texas. The "big one" was the Yates field in Pecos County, one of the most prolific fields ever discovered in this country. Ira Yates, the storekeeper who gave it up for ranching, owned 16,600 acres of land situated over the reservoir. Previously he had ben "going broke" in that most romantic of outdoor enterprises, cattle ranching, but the Yates pool restored his faith in the cattle business. He netted close to $150 million in the most approved Texas fashion.

Development of the Yates field foreshadowed later problems encountered in the East Texas field. There was more oil available than the pipeline could accommodate. Previously, conditions of this kind had led operators to offer their oil for whatever price it would bring. At Spindletop, for instance, oil had been offered for as little as three cents a barrel. In order to avoid this kind of ruinous price-cutting, operators in the field set up a system of voluntary proration. For a time each well was limited to a production quota of about 3 percent of its capacity. Another important feature of the cooperation among operators in the field was a formula that was devised in order to determine how much oil each lease should produce, thus eliminating the usual rush to drill many wells on a lease in order to produce oil as rapidly as possible.

During the latter part of the decade of the 1920's the oil industry generally was in a state of chronic imbalance between supply and demand for both crude and refined products. Oil was consistently produced at a rate that exceeded refinery consumption (crude runs to stills). For protracted periods inventories of crude were sufficient to supply refiners for up to five months even if not another barrel were produced. Refiners, in turn, produced in excess of demand to the extent that sixty days or more of product inventories were on hand. This was partly the result of lack of statistical data on supply and demand and partly due to the folklore of the industry. During the preceding decades, oil men had become obsessed by the fact that demand expanded too rapidly to be satisfied by existing reservoirs and new discoveries. They did not realize that at last, improved methods of exploration had solved the problem of crude shortages. Demand was rising rapidly but not fast enough to keep up with supply.

With towering inventories on hand, prices declined. Profit margins thinned to the vanishing point. In the Mid-Continent area, crude prices dropped from their 1920 high of $3.50 a barrel to $1.00 in 1923, remaining near this figure throughout the remaining years of the decade. High runs to stills and increased competition drove gasoline prices from a peak of 30 cents a gallon at the service station pump in 1920 to 20 cents in 1925 and 16 cents in 1930. Improved refining efficiency added to the flow of products, but it also slowed the rate of decline in refinery realization (profit per barrel of crude refined).

Oil companies had poor earnings in 1927. Some of them were in trouble. The folowing year was another of "profitless prosperity." In 1929 the onset of the Great Depression cut demand severely. Increased production was resorted to in order to offset lower prices and improve total revenue. The inevitable result of this policy was a jump in inventories. In 1930 product inventories rose to more than 100 days supply, based on domestic demand.

Between 1929, the peak year of the boom, and 1932, the bottom of the depression, industrial output dropped by nearly a half and automobile output dropped to about 25 percent of its former value. Although oil consumption dropped proportionately less, the industry was in no position to accommodate the supply of oil provided by discovery of the East Texas field, the largest ever discovered on this continent.

"Dad" Joiner was a little man's little man. An itinerant wildcatter, he had very little in this world except an abiding faith that some day he would strike it rich. When, after two unsuccessful tries, the No. 3 Daisy Bradford was spudded in, Joiner was virtually broke, trading fractions of the lease and even of the well for equipment, groceries and wages to his crew. Because of frequent shutdowns caused by lack of funds, it was more than a year after the well was spudded in that it began flowing oil. No one other than Joiner's creditors was very excited until two other wells were brought in within a twenty-mile radius. It appeared that all were producing from the same reservoir! The resulting rush to obtain leases and begin drilling looked as if it had been produced by Cecil B. DeMille.

Oil soon began to flow from the field at the rate of more than a million barrels a day. Posted prices dropped to ten cents a barrel. Some small operators, desperate for cash, sold crude for a nickel a barrel and less. There ceased to be any semblance of orderly production and marketing of this vital resource.

It took the combined efforts of the governor, the legislature, the courts, and the Texas Rangers to do it, but order was eventually restored and proration enforced. Texas laws and practices in oil conservation established during this period have become the model for other oil producing states.

The history of this twenty-year period was not just one of spectacular discoveries of new reservoirs. Sensational advances in methods of finding, producing, and refining oil were made also. Geophysical methods of exploration greatly improved the prospector's ability to find oil. Metallurgical and engineering improvements increased the depths to which new wells could be drilled. New refining techniques employing "cracking" techniques increased the amount of gasoline that could be extracted from a barrel of oil. Pipelines spread over the country, bringing oil to the refinery and refined products to the consumer.

It was during this era that Texas became the primary producing state, displacing California.

War and Peace: 1941–1960

It has been said that the Allies floated to victory on an ocean of oil. Certainly, the excess producing capacity built up in Texas by discovery of the East Texas field provided a margin of safety that helped to make up for loss of oil-producing areas in Austria, Rumania, and Indonesia to the Axis powers. Texas oil was an important factor in gaining the victory.

At the end of World War II, the United States was the preeminent power in the world. It had the atomic bomb, victorious allies, great resources, and an industrial establishment that had supplied a major part of the material needed to win the victory. Since 1945, the nation has made great progress. The state of Texas has shared in this progress. However, certain problems have arisen that require solution. This is particularly true of the Texas oil industry.

In 1945, the year the war ended, Texas wells produced 755 million barrels of oil. Production increased to 1.11 billion barrels in 1956. During the following years, production has gradually declined. What is the reason for this paradox of declining Texas production in a growing economy? We detect the first symptom of changing conditions if we examine export-import data for 1948. In that year, the United States ceased to be a net exporter of crude. Foreign production had increased to the extent that higher-priced United States crude was displaced from the world market. The increase in foreign production was the result of discovery of enormous oil reserves in the Middle East. Since discovery of the Middle Eastern oil fields, other important discoveries have been made in North Africa and elsewhere. The reserves are appraised at an order of magnitude of hundreds of billions of barrels. United States reserves at present are thirty-odd billions of barrels with about half of these located in Texas.

Import quotas have slowed but not halted the gradual rise in imports. Other states have been unwilling to limit the flow from newly discovered fields to the extent that Texas has. All of this has meant that Texas oil producers have been severely punished in the last two years. The current slow rate of rise in domestic demand offers little prospect of immediate relief.

The problems of surplus capacity existing at present lead the analyst to look to the problems of 1920–29 for an analogy. After all, the industry survived that period and the disasters of the 1930's. Certainly it can be said that the machinery of conservation which evolved during the 1930's provides a pattern which offers hope that a workable solution will be found.

During the 1940–1960 period, great technical advances were made in drilling and refining. Wells are drilled to depths of nearly five miles. It is possible to drill deeper with existing equipment. Refiners have continued to improve the quality of gasoline and lubricants. They now convert 44% and more of a barrel of oil into gasoline.

Important as these technological advances are, they are overshadowed by the development of the petrochemical industry. Like a genie emerging from the orifice of a lamp, it has grown to giant proportions. The Texas Gulf Coast has become a vast complex of petrochemical plants with more being added. West Texas has seen new petrochemical complexes come into being with more in the planning stage. Today more than 40,000 chemical workers produce more than a billion dollars in chemicals each year in Texas.

FROM DOLLAR SHORTAGE TO DOLLAR GLUT—A REAPPRAISAL

By DAVID TOWNSEND*

Author's Note: My thesis is that the relatively small outflow of gold in the late 1950's was a natural by-product of a noteworthy foreign policy success which was brilliantly and laboriously achieved by the United States Government over the fifteen year span following the end of World War II. In the spring of 1959 there was much discussion of the $2.3 billion loss of gold in 1958, which was, by a wide margin, the largest annual depletion of the gold stock in our national history. The news of the gold drain evoked a great deal of viewing with alarm and expressions of concern over the market's state of confidence in the dollar. This alarm continues to find expression. Since the success of any monetary system, and especially an international system, depends on a psychology of confidence, and because I believe the cries of panic to be unwarranted, I raised my voice in rebuttal. I still do.

The open international economy of the pre-1914 period featured a common monetary system among the major trading nations—the gold standard system. Another characteristic of this earlier international system was a high degree of freedom from governmental restrictions and regulations. Firms engaging in financial transactions involving commodities, services, and capital investments enjoyed almost the same degree of freedom to buy and sell in international markets as in domestic markets.

World War I, the great depression of the 1930's, and the threat of World War II virtually destroyed this open or free international economy by the late 1930's. The severe depression in the United States and the threat of a new war caused an abnormal movement of monetary gold to this country. Also, most of the major trading nations imposed many new government restrictions on international economic transactions as a part of many-sided government policies designed to restore domestic full employment.

World War II continued the wrecking job on the open international system inherited from the nineteenth century. Many of this country's important trading partners emerged from World War II with abnormally reduced capacities for production and exports and abnormally large demands for imports. The result was a rapid drain to the United States of their already depleted international monetary reserves (gold, and dollars convertible into gold). Consequently, restrictive government controls, which were used in the 1930's to combat unemployment, were used with even greater vigor after World War II to force imports down to the low level of exports and thus halt the loss of international money to the United States. See Tables 1 and 2. As in the 1930's, from 1946 through 1949 the United States continued to behave like a great vacuum sucking up the world's monetary gold.

The lack of international balance, which served as the continuing justification for these restrictions on the part of most foreign governments, was popularly known as the "dollar shortage." Of course, the main purpose and the

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TABLE 1

U. S. BALANCE OF INTERNATIONAL PAYMENTS

1946–1960

(millions of dollars)

Year	Sales (+) to foreigners		Purchases (—) from, & gifts (—) to foreigners			
	Excess of exports over imports (goods and services)*	Increase in foreign long-term investments in the United States	U.S. Gov't grants and loans, and private gifts to foreigners*	Increase in U.S. private investments abroad	errors and omissions	Overall surplus (+) or deficit (—)
1946	+ 7,744	— 347	—5,923	— 413	+ 195	+1,256
1947	+11,529	— 98	—9,581	— 987	+ 936	+1,799
1948	+ 6,440	— 172	—5,535	— 906	+1,179	+1,006
1949	+ 6,149	+ 119	—6,279	— 553	+ 775	+ 211
1950	+ 1,803	+ 994	—4,163	—1,265	— 30	—2,661
1951	+ 3,721	— 477	—3,648	—1,068	+ 470	—1,002
1952	+ 2,345	+ 443	—2,925	—1,158	+ 505	— 790
1953	+ 437	+ 124	—2,672	— 369	+ 296	—2,184
1954	+ 1,861	+ 252	—2,169	—1,619	+ 167	—1,508
1955	+ 2,066	+ 875	—2,796	—1,211	+ 446	— 620
1956	+ 3,876	+ 395	—3,027	—2,990	+ 643	—1,103
1957	+ 5,810	+ 309	—3,276	—3,175	+ 748	+ 416
1958	+ 2,272	+ 55	—3,309	—2,844	+ 380	—3,446
1959	— 96	+1,217	—4,135	—2,301	+ 783	—4,532
1960**	+ 3,840	+ 360	—3,520	—3,440	—1,040	—3,800

* Excluding military supplies and services transferred under grants.
** Preliminary.
Sources: *Balance of Payments Statistical Supplement*, U.S. Department of Commerce, 1958; *Survey of Current Business*, U.S. Department of Commerce, March 1959, June 1960, and February 1961.

main effect of these controls, which were imposed by most foreign governments, were to reduce United States sales of commodities, services, and capital investments to the rest of the world.

Our Foreign Economic Objectives and Policies

As the post-World War II era began, the United States Government set out to achieve two foreign economic objectives:

(a) to build a world economy with healthy customers able to pay for our goods; and

(b) to induce other governments to remove restrictions on the flow of goods and money so that the world could reap the economic advantages produced by a system of free multilateral trade and payments.

TABLE 2

SETTLEMENT OF OVERALL SURPLUS (+), OR DEFICIT (—)

1946–1960

(millions of dollars)

Year	Overall Surplus (+) or Deficit (—)	Foreign liquidation of short-term dollar assets	Foreign acquisition of short-term dollar assets	Increase in U.S. gold reserves	Decrease in U.S. gold reserves
1946	+1,256	633		623	
1947	+1,799		363	2,162	
1948	+1,006		524	1,530	
1949	+ 211	47		164	
1950	—2,661		918		1,743
1951	—1,002		1,055	53	
1952	— 790		1,169	379	
1953	—2,184		1,023		1,161
1954	—1,508		1,210		298
1955	— 620		579		41
1956	—1,103		1,409	306	
1957	+ 416		382	798	
1958	—3,446		1,171		2,275
1959	—4,532		3,457		1,075
1960*	—3,800		2,111		1,689

* Preliminary.

The United States Government's unprecedented, almost breathtaking, program of direct economic aid to rebuild and develop foreign economies has undoubtedly been a major factor in the achievement by 1961 of a world abounding with healthy customers with ample dollars to pay for our goods.

Securing the removal of direct government controls has proven to be the most difficult of the two objectives. Since the controls insulate the domestic economy from disruptive external shocks, a substitute insulator or buffer was needed. Therefore, the United States has provided much of the rest of the world with an alternative shock absorber in the form of international monetary reserves. That is, the United States Government's programs of foreign grants, loans, encouragement of private investment abroad, and reduction in our import barriers have permitted foreign governments and banks to add significantly to their ownership of short-term dollar assets and gold.

Most important, the long and large build-up in foreign-owned international monetary reserves is finally producing the desired results. On February 15 of this year the International Monetary Fund issued the dramatic announcement that...

Belgium, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Peru, Sweden, and the United Kingdom—accepted the obligations of convertibility of their currencies, as set forth in Article VIII of the Fund's Articles of Agreement.

These countries had previously availed themselves of Article XIV of the Agreement, under which members are permitted to maintain and adapt exchange restrictions without obtaining the prior approval of the Fund. Article VIII, on the other hand, requires those members which are subject to its provisions to avoid restrictions on current payments, multiple exchange rates, and discriminatory currency practices. If these countries were ever again to resort to such measures, they would have to consult with the Fund and obtain its prior approval. Ten other countries, all in the Western Hemisphere, had previously accepted the obligations of Article VIII.

Practically all currencies used to finance international trade and payments are now convertible under Article VIII. This constitutes an important step toward the realization of the multilateral system of payments envisaged in the Fund Agreement, and gives added assurance that the convertibility of the major trading currencies will continue unimpaired and that the balanced growth of world trade will not be hampered by any unwarranted use of exchange restrictions.

TABLE 3

SUMMARY OF 15 YEAR PERIOD

1946–1960

(millions of dollars)

Net deficit with the rest of the world	$16,958
Net increase in foreign holdings of short-term dollar assets	14,691
Net decrease in U.S. gold reserves	2,267

The present move by the ten countries to Article VIII has become possible after years of effort by these countries to strengthen their internal economies and to achieve a sufficiently strong balance of payments and *reserve position* to enable them to remove restrictions on current international payments.

The statistical measures of the magnitude of the United States' effort in restoring a relatively open or free international economic system may be observed in the United States Balance of International Payments for the 15 years from 1946 to 1960. (Tables 1, 2, and 3)

The growth in foreign capacity to produce and the willingness of the United States to accept imports are reflected in the decline in the annual export surplus from the overpowering levels of 1946–1949. Note that the export surplus of $7.7 billion in 1946 and $11.5 billion in 1947 declined to an import surplus of $0.1 billion in 1959 and an export surplus of $3.8 billion in 1960. This movement toward balance in the current account took place as United States exports expanded from $14.7 billion in 1946 to $27.1 billion in 1960 and as our imports increased from $6.9 billion to $23.3 billion. See Tables 2 and 3.

The principal offsets to this country's chronic, but declining export surplus have been United States Government grants and loans to foreigners. This total, including private gifts to foreigners, has averaged over $4 billion a year for the 15 year period. In recent years United States private investments abroad have been major sources of dollars to the rest of the world. This private outflow of funds has averaged almost $3 billion a year for the five years 1956–1960.

The combination of a declining export surplus and a consistently large outflow of funds resulting from government grants and loans, and private investments has produced an overall balance of payments deficit in every year since 1949 except for 1957. These deficits were settled as the rest of the world acquired almost $17 billion of additional monetary reserves. The net increase in foreign-owned short-term dollar assets was $14.7 billion. and the net increase in foreign-owned gold as a result of transactions with the United States was $2.3 billion. (Both of these figures cover the 15 year period, 1946–1960.)

These statistics and the recent concerted move to an open or free international economy (in the noncommunist world) constitute objective proof that the United States has accomplished the two foreign economic objectives of the postwar period. Using the successful attainment of the post-World War II goals as criteria, the United States foreign economic policies, pursued consistently by the Truman and Eisenhower administrations, must be judged successful.

In summary, the rest of the world is setting impressive production records and is demonstrating ample capacity for earning dollars. The cliche, "dollar shortage," has been replaced by "dollar glut." Foreign reserves of gold and short-term dollar assets are large and comfortable—and, as expected in 1946, this condition has produced a degree of freedom in international markets for goods and funds unknown for several decades. This is the kind of world economy we set out to create 15 years ago—and we have succeeded.

After Success—New Problems

But, as it usually happens, when the problems of the past fade into history new problems emerge. The creation of a relatively free international economy, and the United States' new position of banker to the world are responsible for many new and interesting international, financial problems. The one briefly described in this final section is perhaps the most important.

In the 1940's and 1950's, while other countries controlled international trade and payments and the United States enjoyed a world seller's market, most nations, including our own, sharpened their domestic countercyclical tools: chiefly, the monetary tools of credit restriction and high interest rates to combat inflation, and monetary expansion and low interest to offset business recession.

Now, in the 1960's the latent conflict between the new managed national monetary systems and the uncontrolled or open international economy is out in full view of businessmen and statesmen.

The United States' experience in 1960 is illustrative of the conflict. As the recession of 1960–1961 developed, the Federal Reserve authorities used their instruments of monetary management to increase bank reserves and the money supply and to lower interest rates in order to encourage greater flow of expenditures and production, and greater employment of resources. Hence, the money-managers' behavior followed the same countercyclical pattern characteristic of the 1953–1954 and 1957–1958 recessions.

But, in the absence of exchange controls, liquid funds move freely across national boundaries in search of high interest rates. And, of course, the outflow of dollars to foreign money markets in the latter half of 1960 was well publicized. As United States interest rates declined, and as dollars piled up in foreign hands, foreign governments were obliged to buy the unwanted dollars to avoid their depreciation (or appreciation of foreign monetary units in terms of the dollar). Unfortunately, this increase in foreign official holdings of dollars came at a time when foreign dollar reserves were already adequate. In fact, the really token outflows of gold in 1958 and 1959 were simply gentle reminders by foreign central bankers that the problems of 1946 had been solved and that the time had arrived for the United States to balance its international accounts—or the dollar would cease to be a preferred substitute for gold as an international monetary reserve.

Therefore, a key question in the 1960–1961 recession has been, and is, how can the United States Government eliminate the balance of payments deficit without resorting to controls over international trade and payments, or depreciation—in short, without violating the rules of economic behavior which we have been advocating for others for 15 years? The answer, of course, is domestic monetary and fiscal controls. Yet, the use of these controls for balance of payments reasons would mean tight money and high interest rates in order to restrict the domestic flow of expenditures and income. If we drive domestic incomes and prices down, we will import less and export more; and if we drive interest rates up, we will halt the outflow of dollars for investment reasons. But, restrictive monetary policies would accentuate the recession. The conflict is clear. Our government cannot simultaneously pursue a restrictive and expansionist monetary policy.

A rather sobering conclusion may be that part of the price we must pay for an uncontrolled international economic system involves, at least, moderate restraint on our ability to manage our domestic affairs. The discipline of the balance of payments, which was supposedly a dominant factor in the pre-1914 international gold standard era, is one of the new facts of life in the 1960's.

REVENUE RECEIPTS OF THE STATE COMPTROLLER

Source: State Comptroller of Public Accounts

Account	September 1–February 28		Percent change
	1960–61	1959–60	
TOTAL	$ 539,621,953	$ 559,188,884	— 3
Ad valorem, inheritance, and poll taxes	31,616,444	37,641,686	—16
Natural and casinghead gas production taxes	29,016,279	25,018,973	+16
Gas severance beneficiary tax	25,507	118,755	—79
Crude oil production taxes	60,226,169	62,624,867	— 4
Other gross receipts and production taxes	13,264,469	12,429,239	+ 7
Insurance companies and other occupation taxes	1,117,461	787,991	+42
Motor fuel taxes (net)	92,569,490	90,694,139	+ 2
Cigarette tax and licenses	44,845,782	39,920,926	+12
Alcoholic beverage taxes and licenses	18,712,439	18,450,615	+ 1
Automobile and other sales taxes	17,838,743	16,910,297	+ 5
All licenses and fees	23,023,529	21,456,468	+ 7
Franchise taxes	5,808,339	13,741,402	—58
Mineral leases, land sales, rentals, and bonuses	13,529,268	12,687,817	+ 7
Oil and gas royalties	14,275,393	14,765,369	— 3
Interest earned	15,433,924	14,879,183	+ 4
Unclassified receipts	6,213,092	5,969,763	+ 4
Other miscellaneous revenue	6,079,158	5,769,474	+ 5
Federal aid for highways	63,564,639	83,250,841	—24
Federal aid for public welfare	62,593,315	60,978,183	+ 3
Other federal aid	19,696,364	20,949,660	— 6
Donations and grants	172,149	143,236	+20

SCHOOL CONSTRUCTION PACE QUICKENS

By CHARLES O. BETTINGER

Texas school construction rose to a record high in 1960 with a total of $98,949,000 in authorizations. Prospects for 1961, however, indicate that the new high will soon be exceeded. Already, in the first two months of this year, total dollar valuations of building permits have advanced 5% over last year. This percentage increase for the remainder of the year would push total school construction over the $100 million mark easily in 1961.

Vast changes in the age composition of the total populace in the last 10 years pose a very complex problem, especially when combined with the rural-to-urban migration that has caused some communities to sprout up overnight and others to lose as much as one-third of their population. Local, county, and state officials are coping with the new problems, problems which, if not solved, could cause the Texas educational system to be completely inadequate to meet the needs of this decade.

ESTIMATED VALUE OF BUILDING AUTHORIZED

Source: Bureau of Business Research in cooperation with the Bureau of the Census, U. S. Department of Commerce

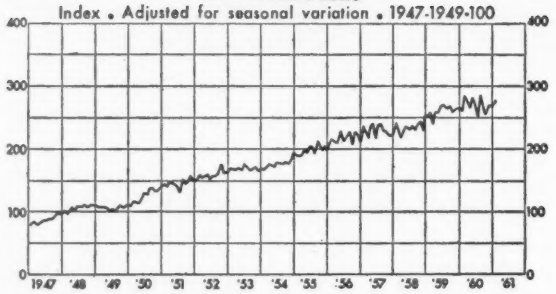
Classification	Feb 1961	Jan-Feb 1961	Percent change: Feb 1961 from Jan 1961	Percent change: Jan-Feb 1961 from Jan-Feb 1960
	(thousands of dollars)			
ALL PERMITS	95,874	199,074	— 7	+ 5
New construction	83,451	175,887	— 10	+ 8
Residential (housekeeping)	46,924	95,496	— 3	— 12
One family dwellings	42,873	85,961	**	— 14
Multiple-family dwellings	4,051	9,535	— 26	+ 14
Nonresidential buildings	36,527	80,391	— 17	+ 30
Nonhousekeeping buildings (residential)	485	3,273	— 83	+ 69
Amusement buildings	1,394	1,754	+287	+167
Churches	1,661	2,980	+ 26	— 53
Industrial buildings	2,582	5,206	— 2	— 1
Garages (commercial and private)	550	995	+ 24	— 29
Service stations	482	1,141	— 27	— 36
Hospitals and Institutions	4,831	18,002	— 63	+1198
Office-bank buildings	6,271	10,189	+ 60	+ 27
Works and utilities	497	2,887	— 79	— 38
Educational buildings	8,896	16,933	+ 11	+ 5
Stores and mercantile buildings	6,409	12,764	+ 1	+ 3
Other buildings and structures	2,469	4,267	+ 37	+120
Additions, alterations, and repairs	12,423	23,187	+ 15	+ 25

** Change is less than one-half of one percent.

Although no single agency can claim all of the credit for the assistance in school construction in the areas where needs are greatest, the Texas Education Agency has probably contributed more than any other organization to this dynamic growth. Help from this agency comes in the form of technical advice, economic surveys, and the administration of a statewide program of education that will enable this state to match the pace of the population growth. School construction assistance is not only an integral part of this overall educational program but an important contribution to the building construction industry in Texas.

Any school district or combination of districts in Texas may investigate obtaining assistance for a building program by requesting a facility survey to determine the feasibility of building a new school. These surveys are conducted by the Texas Education Agency at no cost to the individual school district. Surveys include such information as the characteristics of the community, the student population, a building evaluation, cost data, operating costs, financial status of the district and, finally, a set of recommendations. With this information the school district may proceed in the manner which best meets its needs.

Texas Bank Debits



As a result of the combined efforts of all agencies involved in the planning of new schools, over 150 new public schools were completed during the 1959–1960 school year. The grade levels of the schools completed were as follows: elementary—99; junior high school—19; senior high school—31; combination—10. The total cost of this building program was $63,090,901. Additions and alterations to existing schools continued at record levels for a total of $28,700,203. The grand total of construction costs during the last school year approached $100 million and can be expected to exceed the figure in the current period.

Costs for all grade levels of school construction have risen continually, especially in the elementary schools as more special equipment is deemed necessary at that level. The remaining factor is the size of classrooms and the total area per pupil. Elementary school buildings require smaller classrooms and, therefore, more wall construction, boosting the total cost of the unit above secondary schools.

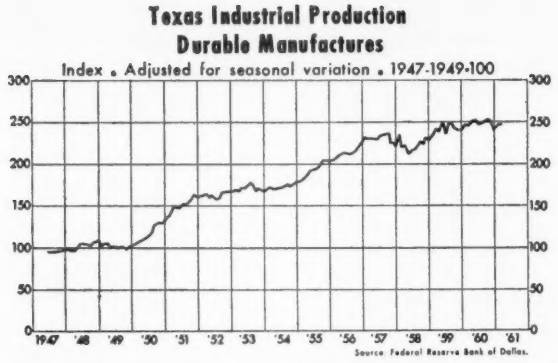
One of the latest surveys of proposed school construction by the Texas Education Agency shows that the total area per pupil in senior high schools is normally about double that of the elementary schools. Offsetting cost factors in the secondary schools are special laboratories and equipment, gymnasiums, auditoriums, and sometimes stadiums.

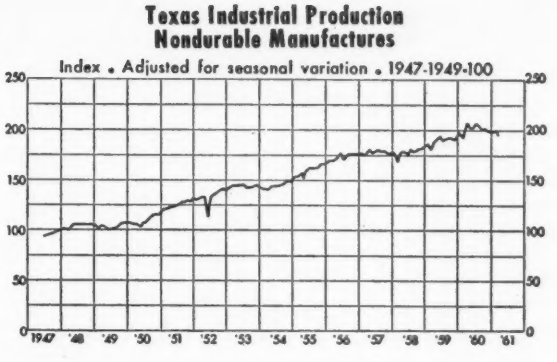
Area fluctuations in building costs reflect the different types of building materials used as well as the type and

LOANS BY SAVINGS AND LOAN ASSOCIATIONS

Source: Federal Home Loan Bank of Little Rock

Type	Feb 1961	Jan 1961	Feb 1960	Percent change: Feb 1961 from Jan 1961	Percent change: Feb 1961 from Feb 1960
	Number				
ALL LOANS	4,121	3,672	3,818	+ 12	+ 8
Construction	724	649	760	+ 12	— 5
Purchase	1,843	1,628	1,810	+ 13	+ 2
Other	1,554	1,395	1,248	+ 11	+ 25
	Value (thousands of dollars)				
ALL LOANS	42,022	$36,105	$36,991	+ 16	+ 14
Construction	9,037	7,878	9,405	+ 15	— 4
Purchase	18,995	17,688	17,883	+ 7	+ 6
Other	13,990	10,539	9,703	+ 33	+ 44





grade level of the building being built. Latest proposed construction reports indicate that there is an extremely large differential in various areas. For example, a proposed Sherman elementary school listed total costs per square foot at $19.37, while a Midland elementary proposal amounted to $9.40. The size of the building in this instance decreases the square foot costs since the Midland building was more than three times as large.

Another important cost item to the individual school district is the construction cost per pupil which was also highest at the senior high school level ($1,125 per student). Junior high school construction cost per pupil was $911, and the per pupil cost was $564 for elementary schools. These figures enable the districts to estimate roughly the cost of new student plant facilities after a brief analysis of their present and future needs, but it should be noted that there is a wide variance in these figures. In most cases, the costs of additions are usually somewhat lower than a completely new plant, since part of the old building may be used as a base for some pupil activities. Again, however, construction costs per pupil vary widely depending on the type and size of construction. Another example of this cost differential was a junior high school proposal at Goose Creek last year in which total costs were estimated at $2,464 per student as compared to one proposed by the North East Houston District at $679 per pupil. The latter is to be twice as large.

In a schoolhousing report to the Department of Health, Education, and Welfare in Washington, D. C., the status of needed classrooms in Texas during the 1958–59 school year was as follows: classrooms needed to accommodate excess enrollment—2,464; classrooms needed to replace unsatisfactory facilities—2,093. When multiplied by the typical factor of 30 students per classroom, unhoused or improperly housed students numbered approximately 136,710. The average total cost per student of proposed construction in 1959 amounted to $1,309. This cost figure, when multiplied by those needs, indicates a program in Texas that would exceed $175 million for the needed facilities two years ago. Since that time the situation has become more critical and will require even more of an outlay than the amount for the original plant alone, excluding the necessary operation costs for continued maintenance and repairs.

Some of the basic problems of school construction fall into the category of population change and migration. In the United States, roughly 10% of the total population are currently in the 10 to 14 year-old age bracket, a group soon ready for senior high school. This will impose a tremendous burden on all school districts to maintain adequate facilities for this kind of increase in the number of students. The only answer is to build more schools.

While senior high schools will be put to the supreme test in the population wave, junior high and elementary schools will be faced with the same problem but not to the extent that they have been in the past five years; junior high construction will bear the brunt of the increase.

Again, emphasis must be placed on the fact that the preceding statements are based on a statewide average, which in almost no instance reveals the needs of any specific area. The last census clearly illustrates the importance of the migration within the state and the effect upon various Texas communities. For instance, in the ten-year period between the 1950 and the 1960 census counts, many small cities outside metropolitan areas showed gains in excess of 1,000%, while other rural communities lost as much as one-third of their total population.

The effect of this rural-to-urban migration is twofold depending on the area in question. For instance, a new city which springs up overnight often finds itself with such inadequate school housing as makeshift barracks, multiple sessions, rented units, and the like. On the other hand, the rural areas in which the population is decreasing are faced with loss of taxes in the school district necessary for the proper maintenance and repair of existing structures.

The State Legislature, recognizing this problem, has enacted the Minimum Foundation Plan. The normal procedure is for the individual school district to supply its own school plant by floating a bond issue on their taxable assets. All school districts must contribute to the Minimum Foundation Fund on the basis of an economic index which is computed for all school districts by the Texas Education Agency. The money is then redistributed to the school districts on the basis of their current and needed facilities. This money is normally used to supplement teaching salaries and some operating costs of the schools in that district so that some assurance of a minimum education will be supplied to everyone in the state.

In summary, the prospects for school construction in 1961 and the immediate future are very good with total school construction possibly exceeding the $100 million mark in the coming year. The next five years point to an exceptional amount of senior high school construction, somewhat less of a building increase at the junior high level, and even less of an increase in elementary school construction. Possible federal subsidies to school construction could provide an additional stimulus in the near future.

IMPACT OF THE COMPACTS

By BUFORD A. CASEY*

Compact cars have had a revolutionary effect upon automobile marketing. It is a revolution started by the consumers demanding a reversal of the decades-long trend toward longer bodies, containing more powerful engines, costing more and more to obtain, operate, and maintain.

This consumer revolution began in 1960 when 1.6 million new U. S. compact cars were chosen over other offerings in new and used automobiles. In addition, 500,000 imported cars, over 80% of which were small sedans and station wagons, were purchased. U. S. compacts and nonsports small car imports combined for a whopping two million—30% of U. S. new car sales of 6.6 million in 1960.

In 1959, the best previous year for reduced-size cars, U. S. compacts (605,000) and imported small sedans and wagons (480,000) accounted for 18% of a somewhat smaller market of six million new cars. Nearly a million more U. S. compacts were sold in the United States in 1960 than in 1959.

SHARES OF U. S. PASSENGER AUTO MARKET CAPTURED BY COMPACTS AND IMPORTS

Year	Total sales in U.S. (in millions)	Index of total sales in U.S. (1959 = 100)	Foreign autos sold in U.S.		U.S. compacts sold in U.S.		Foreign and U.S. compacts sold	
			(in millions)	Percent of total sales	(in millions)	Percent of total sales	(in millions)	Percent of total sales
1961 (Est.)	6.2	103.3	0.35	5.6	2.20	35.5	2.55	41.1
1960	6.6	110.0	0.50	7.8	1.62	24.5	2.12	32.3
1959	6.0	100.0	0.60	10.0	0.60	10.0	1.20	20.0
1958	4.7	78.3	0.39	8.3	0.38	8.1	0.77	16.4
1957	6.0	100.0	0.26	4.3	0.30	5.0	0.56	9.3
1956	6.0	100.0	0.10	1.7	0.24	4.0	0.34	5.7
1955	7.2	120.0	0.06	0.8	0.21	2.9	0.27	3.7

Among U. S. automobile manufacturers, Mr. George Romney, President of American Motors, stood almost alone for several years against the Big Three in his insistence that people in increasing numbers wanted an economical car which was larger than small-car imports but smaller than the traditional-size U. S. makes. Mr. Romney was so well supported by customers in this viewpoint that by the end of 1959, reduced-size, nonsports automobiles had captured almost one-fifth of the U. S. market.

By 1959, other U. S. auto makers had been forced to reverse their opposition and tool up to produce compacts. This move followed quite a public battle of "Who best knows his market—George Romney or the Big Three?" In retrospect, denials by the Big Three right up to 1959 that sufficient consumers wanted compacts to warrant setting up a production line are a little amusing. Ford's *Buyer's Digest of New Car Facts for '59* contains two articles that missed their prophetic intent. One is entitled, "Farewell to the 'Straight Stick'!" The other, heavily slanted toward the advantages of traditional-size cars, is called, "Small Car: Fact or Fad?"

Who can blame Detroit for being cautious after almost fifty years of dominance by mass-produced, traditional-size, low-priced cars? From the time Henry Ford's Model T was introduced in 1908, until the mid-1950's, most large, luxury makes have had to take a chance on being squeezed out of the market by a few bad years in succession. Ford's moving assembly line, conceived in 1912, was so effective in bringing prices down that by 1919 half of the 1.5 million cars sold were Model T's. Further, never before the Rambler has a U. S. small car won enough acceptance with buyers to more than hang on in hopes of of a better market someday. Among those makes of recent years that felt the disdain for small cars by Mr. Average American are the Crosley, the Henry J., the Willys, and the Allstate (made by Willys, and sold by Sears, one of two attempts by Sears to enter the automobile market).

When the 1.6 million U. S. compacts and 0.5 million imports are taken from the total U. S. sales of 6.6 million for 1960, there's a hefty 68% (4.5 million units) of the U. S. market for all traditional-size makes of passenger cars. Why, then, should they feel threatened?

Disturbances by compacts to long-term market alignments take several courses. By reversing the trends toward greater horsepower and longer bodies, compacts stopped threats by the combined efforts of middle-priced lines such as Pontiac, Oldsmobile, DeSoto, and Buick to dominate the market. Buick, for example, made it to third place for a brief year of glory in 1954. Buick's 1961 bid for volume will be through its Special, a compact Buick.

While stopping the steady climb and share of the market by the middle-priced makes, compacts have also threatened the low-priced, traditional makes, especially the leaders, Chevrolet, Ford, and Plymouth. To look at Chevrolet alone, this might not appear to be a threat at all. Traditional-size Chevys accounted for over 1.4 millions units, 21% of all U. S. passenger car sales in 1960. Ford, though, slipped badly in sales of traditional-size units. More units of Ford and Falcon were sold in 1959 (1.5 million), when the Falcon had only a couple of months of sales, than in 1960 (1.4 million), when Falcons made up almost half a million of total Ford and Falcon sales.

Plymouth had 253,000 sales of traditional-size cars in 1960 (the compacts are called Plymouth Valiants). This poor showing lowered Plymouth to eighth place in 1960, when compacts are listed separately. In 1959, on the other hand, Plymouth alone sold 390,000 cars, third place in the market, the Valiant having been delayed in its market entry.

In a 1960 market which was about 10% larger than the six million units of 1959, this drop of 35% in one year by the pre-Valiant Plymouth and the severe slide by the pre-Falcon Ford reflect just how powerful the impact of the compacts has been to the "Low-Priced Three."

Behind sales outcomes for U. S. compact makers are strategies that put quite a different meaning upon "units sold" comparisons. Ford's Falcon (451,000 in 1960)

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proved that people wanted a U. S.-made car that is smaller than the Ford line, yet larger than European cars of the Renault and Volkswagen class. Although curtailing some of Rambler's potential (422,000 sales in 1960), Ford and the other new U. S. entrants have helped to expand the total market for compacts. While being so unexpectedly successful with Falcons, 1960 sales of traditional-size Fords slipped 30% below 1959. These Fords got 21% of the U. S. passenger car market in 1959, only 14% in 1960.

How much Falcon volume in 1960 was achieved as a substitute for Fords, Ford Motor Company executives must still be trying to determine. The conservative "reduced proportions of a standard Ford" approach to the design of its compact seemed the safer policy. Despite the neat success of the Falcon, total unit sales of all Ford-name cars in 1960 (1.4 million) were a little under sales in 1959 (1.5 million). Ford dealers are sharing in the success of the Falcon, but some observers of the perpetual automotive tournament think that this is a bittersweet victory over Chevrolet.

U. S.-MADE NEW-CAR REGISTRATIONS

1960 position	Number registered in 1960 (in thousands)	Make**	Number registered in 1959 (in thousands)	1959 position
1	1,467	Chevrolet[1]	1,419	2
2	969	Ford[2]	1,471	1
3	451	*Falcon* (Ford)	On mkt. 2½ months	
4	422	*Rambler* (Am. Mtrs.)	363	5
5	387	Pontiac	382	4
6	340	Dodge (About 80% Darts)	167	8
7	339	Oldsmobile	361	6
8	253	Plymouth	390	3
9	252	Buick	246	7
10	230	*Corvair* (Chevrolet)	On mkt. 2½ months	
11	193	*Valiant* (Plymouth)	Not on market	---
12	158	*Comet* (Ford)	Not on market	---
13	151	Mercury	158	9
14	150	Cadillac	135	10
15	106	*Lark* (Studebaker)	133[3]	11
16	80	Chrysler	64	12
17	23	De Soto	42	13
18	21	Lincoln	29	14
19	17	*F-85*[4] (Oldsmobile)	Not on market	---
20	17	*Lancer*[4] (Dodge)	Not on market	---
21	16	Imperial	18	15
22	15	*Special*[4] (Buick)	Not on market	---
23	12	*Tempest*[5] (Pontiac)	Not on market	---
	508	All others (Incl. imports)	661	
	6,577	All makes	6,041	

* Adapted from *Automotive News*, February 20, 1961.

** Compacts in italics and their makers shown in parentheses.

[1] Corvairs (introduced in October 1959) included in 1959 Chevrolet registrations.

[2] Falcons (introduced in October 1959) included in 1959 Ford registrations.

[3] All Studebakers.

[4] Introduced in October 1960.

[5] Introduced in November 1960.

By what reasoning, after selling twice as many Falcons as Corvairs, might Ford have lost the first round in the battle of the U. S. compacts? Enter another crusader—Mr. Edward Cole, General Manager of Chevrolet Division and a General Motors Vice-President. Mr. Cole has been such an enthusiast for the rear engine for so long that he had a few years over competition in his testing, without knowing where or when his innovations would be put into a production model. When General Motors decided to offer a compact, it was faith in Cole's air-cooled, aluminum block rear engine that persuaded its officers to take the greatest gamble in the market.

Has their gamble been a wise decision? Forecasts for 1960 were very near actual sales—much closer than sales of Ford or Plymouth were to budgeted units. Sales of Falcons so far exceeded Ford's or competitors' estimates for any of the U. S. compacts in their first full year that Chevrolet's being close to its estimate might have been a forecaster's delight but a stockholder's delusion, especially had Chevy's sales of traditional-size cars slipped as much as did sales of non-Falcon Fords. As it happened, Chevrolet sold a few more of its traditional sizes in 1960 than in 1959 and retained its market share, while Ford was suffering a 7% drop in market share held by the non-Falcon offerings.

It is too soon to predict the winner in this struggle, for, in a number of past years, Ford has bounced back after a temporary setback. Caution in assuming cause and effect could give a different outlook from that found in speculations upon the Detroit scene. Sales of Corvairs may increase at an accelerating rate in 1961 and 1962, leaving Chevrolet dealers as little able to prevent "substitution" purchases for traditional Chevrolets as were Ford dealers in 1960. Many a sale of a U. S. compact was in lieu of a used car, some where bonus sales to persons who would not have bought a new car if U. S. compacts had not been available, and others were in place of small-car imports.

MONTHLY NEW-CAR IMPORTS BY U. S.

	1960	1959
January	47,572	52,019
February	64,329	47,126
March	65,216	54,184
April	54,521	55,977
May	46,196	64,553
June	33,313	60,321
July	29,356	65,241
August	19,361	47,560
September	20,636	51,821
October	22,538	50,082
November	16,985	60,655
December	24,451	58,531
TOTAL	444,474	668,070

Source: *Automotive News*, February 20, 1961.

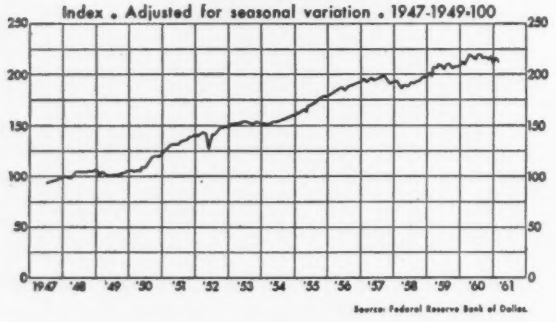
U. S. compact cars were the direct cause of the weakening of position for most foreign cars in the U. S. market. It cannot yet be determined if it is an appeal to "Spend your money for a U. S. car," or if the U. S. compact size is what former prospects for imports prefer. List prices on imports have been slashed as much as 13% since January. A Renault Dauphine four-door, for instance, is now $200 less than in 1960, listing at $1,399 including heater at Houston. A Ford Falcon lists at $2,140 including heater. Quite a difference in price; also, quite a difference in interior space and horsepower in favor of the Falcon. There is some possibility that import-size small cars will be made in U. S. factories within a year. Ford has announced it is experimenting with such a line.

The recent drastic drop in used car prices has been blamed, at least partly, upon the customer-attracting compacts. Many dealers feel that compacts are taking business from recent-model used cars. No doubt, many buyers of compacts have preferred a new car to a good used one of traditional size with more accessories. The economy-minded buyer, especially, would be favorable to the compact in this choice.

At the same original cost as a recent-model used car, the compact has a 12–12 warranty (12 months or 12,000 miles, whichever is first, on defective parts and workmanship), presumably it depreciates a little less rapidly—not enough of them have gotten to the used car market to be certain yet—it uses appreciably less gasoline (assuming ten thousand miles of driving, this can be a savings of $90 to $130 a year), and other operating costs and insurance can be a little less than the recent-model used car.

The buyer could have gotten an assortment of accessories on a used car, including a radio, heater, power steering, power brakes, power windows, and air conditioning. The

Texas Industrial Production
Total Manufactures



used car buyer gets, as well, a partly worn set of tires, and he usually inherits some needed repairs and upkeep the first year, such as replacement of battery, purchase of seat covers, electrical system repair, brake relining, wheel alignment, and other items which might be needed to put the car in top condition. These can cost anywhere from $100 to $200 the first year. During this time, the used car buyer also usually is paying off a contract. Many used car buyers have had this experience, so U. S. compacts look pretty good in terms of total cost, especially since these U. S. cars will accommodate a family with two or three children quite comfortably.

Until a research project is completed on the new millions of buyers of compact cars, a composite of a number of Texas dealers' judgments of the most numerous buyers may serve for some enlightenment.

1. As with all car sales, private, individual (nonbusiness) ownership predominates, although there has been good acceptance for business uses.
2. Believed to be the most numerous buyers are those who purchase a compact as their second car. Almost 20% (8 million) of the car-owning households (about 40 million of the 53 million households in the U. S.) are two-car families. A few are three-or-more car families. Some two-car families own *two* compacts.
3. Some dealers deny that the second-car segment dominates compact sales. Their observation: "Just too many people buy compacts to drive to work or to use in their work to cause me to think that second-car use by wives for family needs is the most frequent reason for buying."

   Often, it is the second-car compact that Dad is driving to the office or even using for his sales calls, thus mixing the two-car families and business users. Unless dealers carefully record and analyze principal uses anticipated by buyers, their knowledge of facts for selling their best markets will depend upon delayed research by the factories and trade associations.
4. Several frequent kinds of "compact as the only car" buyers are mentioned by dealers:
   a. Young recently-marrieds—less than five years ago, with not more than two children.
   b. Older couples—children married, auto used to get to office, go fishing, short trips, shopping, social visits. These people feel "sporty" in a compact.
   c. Newlyweds—economy is a prime motive. Further, many younger people tell researchers that owning a compact or sports car is a sign of modernness.
   d. Single men and women—working and/or in college, a few in high school.
   e. Lower middle income families that prefer a new compact to a used car. If there are several children, most U. S. compacts make this choice possible.

There are probably deep-seated psychological and sociological reasons why compact cars are finding such favor with so many buyers and prospective buyers. What began, presumably, as a basic search for economy is developing into at least two markets: the economy compact, with standard engine (in-line four or six cylinders), stick shift, standard upholstery and trim, blackwalls, and a heater, perhaps, as the only concession to an "add-on" comfort; and the "deluxing" of a compact with two-toned upholstery on top of foam rubber cushions (+$30), tinted glass (+$25), radio (+$50), heater (+$45 to $75), whitewall tires (+$25), power steering (+$75), power brakes (+$40), backup lights (+$15), extra chrome (+$35), windshield washers (+$15), air conditioning, especially for Texans (+$225 to $275), and a larger engine (+$25 to $80) to carry the extras up hills faster by the thrust of the automatic transmission (+$150).

Most compacts in Texas are being sold with several "add-ons," because many buyers still want several of the comfort and convenience features. One firm, Chevrolet, is appealing to this market by describing its deluxe compact, the Monza, as "luxury with a sports car spirit."

RETAIL SALES TRENDS BY KINDS OF BUSINESS
Source: Bureau of Business Research in cooperation with the Bureau of the Census, U. S. Department of Commerce

Kind of business	Number of reporting establishments	Percent change: Normal seasonal* Feb from Jan	Percent change: Actual Feb 1961 from Jan 1961	Percent change: Actual Feb 1961 from Feb 1960	Percent change: Actual Jan-Feb 1961 from Jan-Feb 1960
DURABLE GOODS					
Automotive stores†	323	**	**	— 19	— 14
Furniture and household appliance stores	161	— 9	— 11	— 13	— 14
Lumber, building material, and hardware stores	324	— 1	+ 3	— 7	— 4
NONDURABLE GOODS					
Apparel stores	240	— 18	— 15	— 2	— 5
Drug stores	209	— 4	— 3	— 10	— 9
Eating and drinking places	96	— 5	— 6	— 4	— 3
Food stores	493	— 5	— 1	+ 1	— 4
Gasoline and service stations	138	— 4	+ 15	+ 14	+ 5
General merchandise stores†	169	— 10	— 8	**	— 5
Other retail stores†	235	— 5	— 3	— 10	— 8

* Average seasonal change from preceding month to current month.
** Change is less than one-half of one percent.
† Includes kinds of business other than classification listed.

DAIRYING IN TEXAS

By JAMES STAFFORD*

Commercial dairying as a major farm enterprise in Texas is relatively new and undeveloped as compared to the rest of the nation. While many natural advantages, including a long grazing season in certain areas of Texas (particularly Harris County and its surrounding counties), a relatively mild winter climate, and abundant pasture land resources, had long favored the development of dairying, it was not until after World War I that its potentialities received much consideration. The agricultural economy of Texas had long been adjusted for cotton farming, and prior to the encroachment of the cotton boll weevil, any economic justification for change was obscured by the high profits from raising cotton.

A second factor which impeded the early development of dairying in Texas, particularly in the eastern section of the state, was the prevalence of the cattle tick fever. While effective countermeasures for the disease were finally developed, it was not until the 1920's that the tick eradication program received sufficient support of farmers to bring this disease under control. The elimination of the cattle tick placed dairying and livestock farming among the more lucrative alternative enterprises available to farmers after the intrusion of the boll weevil.

Between 1924 and 1938 the number of milk cows on Texas farms increased 69%, while production of milk increased 60%. These increases indicated the growing awareness of farmers to the potential markets for milk caused by the expanding urban population, their demand for milk and milk products, and by the ease with which milk could be transported by trucks to the cities of Texas. The farmers would not be able to meet the demand of the expanding population for many years yet to come; thus the price of milk went up and dairy farmers made good money. This lasted until the depression hit in 1929, when milk prices dropped 28%, and cash receipts from dairy products fell 64% by 1931.

Whole milk sales made up only 10% of the total utilization of milk in 1924, and only 38% of the total milk produced in Texas was sold to commercial markets. The rest was used on the farms themselves. Whole milk sales increased slowly for a total of 18% over the next fourteen years, but the depression's adverse effect on milk prices probably kept this figure from going higher.

World War II put the dairy farmers back on their feet again after ten rough depression years. The number of milk cows reached the all time high of 1,594,000 head in 1945. But as soon as the war was over, the Texas dairy industry slowly began to decline over the next five years. The number of milk cows dropped more than 24% which easily offset the 12% increase in production per cow. The reasons for this decline in total milk production after World War II, even when milk prices continued to rise, may be attributed to the scarcity of labor and to more profitable alternative enterprises. Grain and feed prices continued to increase markedly after the war, and farmers were induced to produce cash crops and beef cattle instead.

The economic well-being of the dairy industry is important to producers and consumers of milk and other dairy products. This industry represents an important segment of the agricultural production of Texas. While only slightly less than 12% of all commercial farmers reported selling whole milk in 1954, the farm value of milk produced by Texas farmers amounted to $172 million, and cash receipts from dairy products were more than 7% of all farm marketings in the state. The retail value of these products amounted to $280 million, or $33 per person in the state. In 1959, sale of dairy products grossed Texas farmers $152.9 million according to the Texas Crop and Livestock Reporting Service. This was 7% less than the 1958 gross income of $165 million and 45% less than the 1954 gross income. The decreased gross income resulted largely from a lower average price of $5.26 per 100 pounds for whole milk sold to plants and dealers. This compares with an average price of $6.89 per 100 pounds in 1952 and $5.46 per 100 pounds in 1958.

Dairy farming and the dairy industry in general have become greatly commercialized. The average dairy farmer is selling larger volumes of milk, and a larger proportion of the milk produced on Texas farms is marketed now than during any previous time. In 1950, 67.6% of the milk produced by Texas farmers was marketed, but in 1959, 83% was marketed. These changes in the production and marketing of milk have great economic significance to the dairy industry and to consumers of dairy products.

Number of Milk Cows

Slightly more than 55% of the farmers in Texas had the 689,000 milk cows on farms on the date of the United States census enumeration in 1954. This was an average of 4.3 cows per farm reporting milk cows. However, in 1954 only 3.3% of the Texas farmers were actually dairy farmers, i.e., those who sell milk commercially; the rest were farmers who kept dairy cattle on their farms but did not sell their milk. By 1959 the number of dairy farmers had declined 17% to an estimated 8,125 in the state. Every year during 1932–1945 there were more than 1.3 million milk cows on Texas farms. In 1959 there were 612,000 dairy cows, and according to the United States Crop and Livestock Reporting Board, there were only 575,000 head in 1960.

Why have the number of dairy cattle in Texas declined steadily since World War II? Since the end of World War II the decreased demand for milk and butterfat, relatively lower prices to dairymen, combined with more rigid sanitary requirements for Grade A milk, and the higher cost of new equipment required has resulted in many commercial dairymen going out of milk production. Also, the wider spread between Grade A and ungraded milk prices has caused many smaller, ungraded-milk producers to go out of the dairy business. This is easy to understand when you look at the large market areas in Texas. For example, in the South Texas marketing area (Houston), all of the dairy farmers produce Grade A milk, according to Mr. R. E. Smith of the South Texas Dairy Producers Association. There is very little room left in Texas for the Grade B milk producers.

Production Per Cow

Traditionally, the average milk cow on Texas farms produced from one third to one fourth less milk than the average for the United States. In 1960 the output per milk

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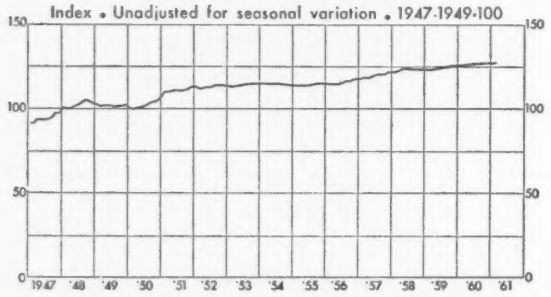
cow (5,090 pounds) in Texas was the highest on record, but this was still 37% below the national average of 7,004 pounds per cow. Texas has increased its production per cow by 73% since 1924, while the national average has increased 68%. Texas milk cows are now producing at the rate that all United States milk cows were producing in 1948. Texas gained most of its 73% increase after World War II.

The lag in production per cow was generally caused by many farmers with little or no experience as dairymen starting to milk cows and sell milk as a new or supplementary enterprise during the depression and World War II. A very large proportion of the cows milked during those two periods were of mixed types that produced less milk than the dairy type breeds. Lack of experience led to improper herd care and management, resulting in inefficient production.

Consumers' Prices in the U. S.



After World War II the relatively large increase in milk production per cow was due primarily to the following factors:

1. The abnormally high prices paid farmers for whole milk of Grade A quality resulted in many dairymen shifting from ungraded to Grade A milk production while at the same time upgrading their milking herds and improving their herd management practices with the help of the dairy associations.
2. Improved pastures resulted in high-quality feed supplies throughout the year.
3. High prices received by farmers for cattle in the late 1940's caused many dairymen to cull their dairy herds and to eliminate low milk producing cows.
4. Artificial insemination became more widely adopted during the war and immediate postwar periods, resulting in further improvement of dairy herds.
5. Increasing costs of producing Grade A milk and lower prices for milk are forcing many inefficient dairymen with low-producing cows out of dairying.
6. Further elimination of 176,000 farm-family milk cows (many of which were low milk producers) from 26% of Texas farms between 1940–1954 also contributed to increasing the average milk output per cow.

Probably of greater significance than any other factor leading to increased total milk sales per farm has been the change from 10-gallon cans to bulk tanks and pipeline milkers on a larger percentage of Texas dairy farms during recent years. The South Texas marketing area has 76% of its farmers storing and shipping 80% of its milk by bulk. While bulk tanks have greatly increased the efficiency of dairymen, they also have resulted in much higher equipment cost. In order to justify those higher costs, most dairymen strive to increase their milk production. They can do this only by milking more cows or obtaining higher producing cows, or both.

Total Milk Production

Even though milk production per cow has increased 73%, total milk production since 1924 has increased only 7.9% as of 1960. Actually milk production in Texas reached its peak in 1942 at 4,435 million pounds.

Total production in 1960 was estimated at 2,927 million pounds, a decrease of 34% since 1942. Thus, total milk production in the state over the years has actually decreased because the reduction in the number of cows has been greater than the increase in production per cow. However, during the past five years, except 1960, total production has been increasing because of the rapid increase in production per cow and the slowing down of the decrease in number of milk cows.

Herd Size and Farm Characteristics

The number of dairy farmers in Texas has decreased from 9,771 in 1954 to an estimated 8.125 in 1959. Of these 8,125 dairy farmers in 1959, 7,775 were dairy farmers producing and selling Grade A milk. Since 1954 all Grade A dairy herds of fifty cows or less have decreased from 30% to 50%, but dairy herds of fifty cows or more have increased 47%. This is a very important statistic because it means the small dairy farmer, as a major contributor, is on his way out of the Texas dairy scene.

RAIL SHIPMENTS OF LIVESTOCK*

Source: Bureau of Business Research in cooperation with the Agricultural Marketing Service, U.S. Department of Agriculture

Classification	Feb 1961	Jan 1961	Feb 1960	Percent change: Feb 1961 from Jan 1961	Percent change: Feb 1961 from Feb 1960
	(in carloads)				
TOTAL	1,252	2,185	1,408	— 43	— 11
Cattle	891	1,756	1,093	— 49	— 18
Calves	176	254	182	— 31	— 3
Sheep	185	175	133	+ 6	+ 39
Interstate	1,125	2,025	1,232	— 44	— 9
Cattle	791	1,673	928	— 53	— 15
Calves	149	177	171	— 16	— 13
Sheep	185	175	133	+ 6	+ 39
Intrastate	127	160	176	— 21	— 28
Cattle	100	83	165	+ 20	— 39
Calves	27	77	11	— 65	+145

* Rail-car basis: cattle, 30 head per car; calves, 60; hogs, 80; and sheep, 250.

Disposition of Milk by Farmers

The distribution pattern of milk produced on Texas farms has shifted markedly during the past thirty-seven years. More than 60% of milk produced in Texas during 1924–1928 was used on the farms where produced, and less than 40% entered commercial channels. In 1953–1957, about 20% was used on farms and almost 80% was marketed. By 1959 marketed milk had increased to 83% of that produced by Texas farmers. This again indicates the high degree of commercialism of the Texas dairy industry during the last decade, which resulted from the response of dairymen to supply fluid milk to an increased urban population and from a greater degree of specialization on the part of many dairy farmers who previously included dairying as supplementary to cotton or other cash crops.

Although total milk production on Texas farms decreased by 17%, whole milk sales rose from 1,870 million pounds in 1950 to 2,478 million pounds in 1959, an added 32%. Even more striking is that whole milk sales have increased 740% since 1924 while total milk production increased only 3.8%. This shows that while the market for whole milk was of secondary importance in the 1920's, it became of primary importance during World War II, and total sales continued to expand through 1959. Three of the most important reasons for this growth were:

1. The rapid rate of urbanization in the state during this period has continued through 1930–1957, as shown by a 134% increase. This trend has continued through 1960 and probably will continue to do so.
2. The continuous growth in consumer income during World War II accounts for a large part of this increase, since consumer buying power is one of the more important factors affecting fluid milk consumption.
3. The large rise in prices received by farmers for fluid milk relative to prices received for butterfat in cream sales during recent years caused many dairy farmers to produce more for the fluid milk market.

Value and Prices

The gross farm income from dairy products and the farm value of milk produced by Texas farmers in 1957 were 99% greater than they were in 1930. By 1959 this had declined to 78% greater. However, the peak in farm value and gross farm income occurred in 1953 when the milk produced in Texas had a farm value of more than $217 million. In 1959 the farm value amounted to $153 million, or 29% less than in 1952, although only 7% less milk was produced.

The decrease in farm value of milk produced by Texas farmers during the past five years resulted primarily from reductions in the price received by farmers for whole milk —from $6.89 in 1952 to $5.26 in 1959.

From the standpoint of actual value of the dollar received from the sales of milk, 1959 was one of the worst years since 1941 for Texas dairy farmers. Farmers received an average of $2.40 per hundred pounds for milk in 1941 and $5.26 in 1959. However, actual prices revealed should be compared with price level changes; since 1941 the wholesale price level has more than doubled. Therefore, in terms of 1935–1937 prices, the $5.26 per hundred pounds received by Texas farmers for milk in 1959 was worth only $2.28.

Milk for Manufacturing

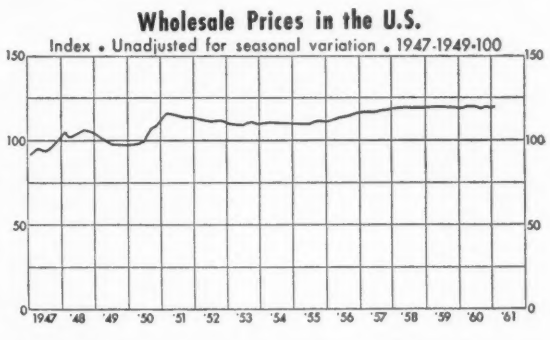
During the ten-year period, 1936–1945, an average of more than one billion pounds of whole milk was utilized per year in the production of manufactured dairy products in Texas. It represents twice the amount used during any year since 1950. For the period 1933–1942 the amount of milk and cream used in manufacturing dairy products represented 45% of the total milk and cream marketed by Texas farmers, compared to an average of less than 20% since 1950.

Most of the decline in the volume of milk and cream used in the manufacture of dairy products resulted from decreases in production of creamery butter and, as stated earlier, the tremendous increase in urban demand for fluid milk. Production of butter decreased in 1941–1959 from 41.2 million pounds to 5.7 million pounds.

The volume of whole-milk equivalent utilized in the manufacture of other major dairy products in Texas also declined. From the peak of 20 million pounds of American cheese produced in 1941, only 6.5 million pounds, or 33% of the 1941 volume, was produced in 1959. Though this represents a large decline in American cheese production over the entire period (1941–1959), it should be noted that production of cheese has increased 30% since 1950.

In ice cream manufacturing, slightly more than 23.4 million gallons were produced in 1950, but by 1959 production had fallen off to 20 million gallons.

Mellorine production started in Texas in 1950 when its production and sale for human consumption was authorized by the Texas Health Department. Government statistics on Mellorine production was started in 1952. In that year Mellorine was produced in only four states, and of the 317 plants in the United States manufacturing that product, 135 were located in Texas. In 1957, 1,022 of the 1,395 plants in the United States were located in Texas. Besides Texas, only nine other states have three or more plants producing Mellorine. California ranks second among the



states as a Mellorine producer, and in 1957 only 3.7 million gallons, or about one fifth as much as the output in Texas, were produced in California. By 1960 Mellorine production showed no signs of slowing down and, in fact, the first eight months of 1960 showed a 9% edge over the first eight months of 1959.

Increased marketings of milk for use as bottled fluid milk and competition from oleomargarine and Mellorine account for a large part of the decrease in the volume of whole milk used in manufactured dairy products. However, increases in the quantity of skim milk equivalents used by Texas plants in specific processed skim milk products during recent years also are a factor.

Location of Manufacturing Plants

As a rule the older plants were built adjacent to areas of ungraded milk production and, as originally designed, most were erected primarily for processing raw milk into milk products. However, as the volume of ungraded (B) milk decreased, managers stressed handling Grade A milk. Thus, many older processing plants are no longer ideally located from the standpoint of sources of raw milk supplies and milk consumers. This is one of the reasons why the number of manufacturing plants has been steadily decreasing since 1950. However, improved transportation facilities and bulk handling have decreased the importance of having raw milk supplies produced nearby and of being located immediately adjacent to large population centers.

Local Business Conditions

As a reader's guide to better utility of retail sales data, an average per cent change from the preceding month has been computed for each month of the year. This percent change is marked with a dagger (†) following that figure. The next percent change represents the actual change from the preceding month. A large variation in the normal seasonal from the actual figure represents an abnormal month. This third percent change is the percent change for the identical period the preceding year showing the change between the two years. Postal receipt information which is marked by an asterisk (*) indicates cash receipts received during the four-week postal accounting period ending March 3, 1961, and the percent changes from the preceding period and the comparable period in the previous year. Annual postal data are for 13 four-week periods falling closest within 1959 and 1960 calendar years. Changes less than one-half of one percent are marked with a double asterisk (**). Houston and Waco retail sales information are reported in cooperation with the University of Houston Center for Research in Business and Economics and Baylor Bureau of Business Research, respectively. End-of-month deposits as reported represent money on deposit in individual demand deposit accounts on the last day of the month. All population figures are final 1960 census data. Figures under Texarkana with the following symbol (§) are for Texarkana, Texas, only.

City and item	Feb 1961	Percent change: Feb 1961 from Jan 1961	Percent change: Feb 1961 from Feb 1960
ABILENE (pop. 90,368)			
Retail sales	— 4†	— 8	— 17
Apparel stores	— 18†	— 22	— 18
Automotive stores	**†	+ 11	— 27
Drug stores	— 4†	+ 1	— 6
General merchandise stores	— 10†	— 23	— 4
Lumber, building material, and hardware stores	— 1†	— 29	— 40
Postal receipts* $	100,658	— 7	+ 2
Building permits, less federal contracts $	823,818	— 44	— 57
Bank debits (thousands) $	91,073	— 15	— 2
End-of-month deposits (thousands)‡ $	65,603	— 1	+ 5
Annual rate of deposit turnover	16.6	— 14	— 6
Employment (area)	35,350	+ 1	+ 9
Manufacturing employment (area)	3,680	+ 1	+ 15
Percent unemployed (area)	6.6	+ 5	+ 6
ALICE (pop. 20,861)			
Retail sales			
Lumber, building material, and hardware dealers	— 1†	— 9	— 4
Postal receipts* $	14,799	**	— 2
Building permits, less federal contracts $	71,990	— 54	+ 85
ALPINE (pop. 4,740)			
Postal receipts* $	3,974	— 4	+ 4
Building permits, less federal contracts $	7,510	.....	— 17
Bank debits (thousands) $	2,550	— 19	— 1
End-of-month deposits (thousands)‡ $	3,620	— 6	+ 1
Annual rate of deposit turnover	8.2	— 16	— 2
AMARILLO (pop. 137,969)			
Retail sales	— 4†	— 8	— 11
Apparel stores	— 18†	— 6	— 18
Automotive stores	**†	+ 15	+ 2
Drug stores	— 4†	**	— 28
Furniture and household appliance stores	— 9	— 12	— 15
Postal receipts* $	176,171	— 3	**
Building permits, less federal contracts $	3,017,174	+ 31	+ 10
Bank debits (thousands) $	196,354	— 19	— 8
End-of-month deposits (thousands)‡ $	116,711	— 3	+ 3
Annual rate of deposit turnover	19.9	— 17	— 10
Employment (area)	51,100	— 3	— 1
Manufacturing employment (area)	5,480	— 9	— 8
Percent unemployed (area)	6.5	— 11	+ 16

City and item	Feb 1961	Percent change: Feb 1961 from Jan 1961	Percent change: Feb 1961 from Feb 1960
ANDREWS (pop. 11,135)			
Postal receipts* $	7,092	— 1	+ 6
Building permits, less federal contracts $	111,375	— 92	— 39
Bank debits (thousands) $	5,596	— 11	.....
End-of-month deposits (thousands)‡ $	8,665	— 5	.....
Annual rate of deposit turnover	7.5	— 7	.....
AUSTIN (pop. 186,545)			
Retail sales	— 4†	— 9	— 10
Apparel stores	— 18†	— 25	— 8
Automotive stores	**†	— 1	— 7
Eating and drinking places	— 5†	— 10	+ 20
Food stores	— 5†	— 9	— 5
Furniture and household appliance stores	— 9†	— 15	— 21
Lumber, building material, and hardware stores	— 1†	+ 5	— 15
Postal receipts* $	886,072	— 6	+ 10
Building permits, less federal contracts $	3,823,653	— 16	+ 19
Bank debits (thousands) $	212,335	— 3	— 1
End-of-month deposits (thousands)‡ $	148,827	**	+ 4
Annual rate of deposit turnover	17.2	+ 2	— 5
Employment (area)	78,100	**	+ 6
Manufacturing employment (area)	5,790	**	— 5
Percent unemployed (area)	4.6	— 18	+ 15
BAY CITY (pop. 11,656)			
Retail sales			
Automotive stores	**†	— 3	— 7
Drug stores	— 4†	— 3	— 9
Postal receipts* $	12,261	+ 29	+ 14
Bank debits (thousands) $	12,148	— 20	+ 4
End-of-months deposits (thousands)‡ $	20,612	— 1	+ 3
Annual rate of deposit turnover	7.0	— 20	+ 1
BAYTOWN (pop. 28,159)			
Postal receipts* $	23,848	— 6	+ 9
Building permits, less federal contracts $	451,680	+ 12	— 38
Bank debits (thousands) $	22,288	+ 4	— 1
End-of-month deposits (thousands)‡ $	24,568	— 1	+ 4
Annual rate of deposit turnover	10.8	— 1	— 4
Employment (area)	509,100	**	+ 4
Manufacturing employment (area)	98,450	**	— 1
Percent unemployed (area)	5.5	— 5	+ 17

City and item	Feb 1961	Percent change: Feb 1961 from Jan 1961	Percent change: Feb 1961 from Feb 1960
ARLINGTON (pop. 44,775)			
Retail sales			
Apparel stores	— 18†	— 26	— 4
Lumber, building material, and hardware stores	— 1†	+ 14	+ 8
Postal receipts*	$ 40,539	+ 7	+ 8
Building permits, less federal contracts	$ 903,962	— 21	— 28
Bank debits (thousands)	$ 27,245	— 9	.....
End-of-month deposits (thousands)‡	$ 20,723	+ 1	.....
Annual rate of deposit turnover	15.8	— 22	.....
Employment (area)	209,200	**	+ 1
Manufacturing employment (area)	53,225	— 1	**
Percent unemployed (area)	6.6	+ 8	+ 20
BEAUMONT (pop. 119,175)			
Retail sales	— 4†	+ 1	— 10
Apparel stores	— 18†	— 4	— 6
Automotive stores	**†	+ 4	— 11
Eating and drinking places	— 5†	— 3	— 16
Food stores	— 5†	— 10	— 1
Furniture and household appliance stores	— 9†	+ 8	+ 23
Lumber, building material, and hardware stores	— 1†	+ 8	— 2
Postal receipts*	$ 117,332	+ 3	+ 7
Building permits, less federal contracts	$ 813,638	— 15	+ 16
Bank debits (thousands)	$ 148,010	— 13	— 8
End-of-months deposits (thousands)‡	$ 102,182	— 2	+ 4
Annual rate of deposit turnover	17.2	— 11	— 11
Employment (area)	105,700	**	+ 3
Manufacturing employment (area)	33,580	**	+ 3
Percent unemployed (area)	8.7	— 4	— 10
BEEVILLE (pop. 13,811)			
Retail sales			
Automotive stores	**†	+ 19	— 21
Lumber, building material, and hardware stores	— 1†	+ 16	**
Postal receipts*	$ 11,014	+ 5	**
Building permits, less federal contracts	$ 103,940	+287	— 51
Bank debits (thousands)	$ 8,786	— 8	— 1
End-of-months deposits (thousands)‡	$ 13,457	— 1	— 1
Annual rate of deposit turnover	7.8	— 9	— 1
BELLAIRE (pop. 19,872)			
Postal receipts*	$ 34,693	+ 47	.....
Building permits, less federal contracts	$ 21,826	+ 29	— 63
Bank debits (thousands)	$ 11,316	— 6	.....
End-of-month deposits (thousands)‡	$ 8,500	+ 1	.....
Annual rate of deposit turnover	16.0	— 9	.....
Employment (area)	509,100	**	+ 4
Manufacturing employment (area)	93,450	**	— 1
Percent unemployed (area)	5.5	— 5	+ 17
BIG SPRING (pop. 31,230)			
Retail sales			
Drug stores	— 4†	— 4	— 15
Lumber, building material, and hardware stores	— 1†	— 23	— 12
Postal receipts*	$ 30,634	+ 3	+ 7
Building permits, less federal contracts	$ 890,198	+ 90	+222
Bank debits (thousands)	$ 34,959	— 19	— 7
End-of-months deposits (thousands)‡	$ 29,782	— 2	+ 4
Annual rate of deposit turnover	13.9	— 21	— 10
BORGER (pop. 20,911)			
Postal receipts*	$ 15,725	— 5	+ 13
Building permits, less federal contracts	$ 87,022	— 64	+ 10
Bank debits (thousands)	$ 16,523	.....	.....
End-of-month deposits (thousands)‡	$ 16,112	.....	.....
BRADY (pop. 5,338)			
Postal receipts*	$ 4,291	— 19	— 24
Building permits, less federal contracts	$ 19,150	+715	— 15
Bank debits (thousands)	$ 3,936	— 11	— 3
End-of-month deposits (thousands)‡	$ 6,515	— 5	— 3
Annual rate of deposit turnover	7.1	— 8	**
BRENHAM (pop. 7,740)			
Postal receipts*	$ 7,191	— 5	**
Building permits, less federal contracts	$ 55,820	— 36	+296
Bank debits (thousands)	$ 7,803	— 9	— 3
End-of-month deposits (thousands)‡	$ 12,253	— 2	**
Annual rate of deposit turnover	7.6	— 6	— 1
BROWNSVILLE (pop. 48,040)			
Retail sales	— 4†	+ 2	— 2
Automotive stores	**†	**	**
Lumber, building material, and hardware stores	— 1†	+ 5	+ 2
Postal receipts*	$ 29,381	— 7	+ 11
Building permits, less federal contracts	$ 172,032	— 89	— 71
Bank debits (thousands)	$ 26,715	— 11	+ 8
End-of-month deposits (thousands)‡	$ 22,004	+ 7	+ 23
Annual rate of deposit turnover	15.1	— 11	— 8
BROWNWOOD (pop. 16,974)			
Retail sales	— 4†	+ 1	— 9
Apparel stores	— 18†	+ 19	+ 8
Postal receipts*	$ 22,325	— 11	— 7
Building permits, less federal contracts	$ 129,675	— 6	— 68
Bank debits (thousands)	$ 14,005	— 8	+ 9
End-of-months deposits (thousands)‡	$ 12,937	— 1	+ 2
Annual rate of deposit turnover	12.9	— 7	+ 8
BRYAN (pop. 27,542)			
Retail sales	— 4†	— 11	— 10
Apparel stores	— 18†	— 12	+ 13
Automotive stores	**†	— 28	— 32
Lumber, building material and hardware stores	— 1†	+ 7	— 35
Postal receipts*	$ 24,909	+ 10	+ 7
Building permits, less federal contracts	$ 148,875	.....	+ 53
Bank debits (thousands)	$ 21,455	— 1	.....
End-of-month deposits (thousands)‡	$ 15,717	— 4	.....
Annual rate of deposit turnover	16.1	**	.....
CALDWELL (pop. 2,204)			
Postal receipts*	$ 1,974	+ 6	— 1
Bank debits (thousands)	$ 1,876	— 20	+ 1
End-of-month deposits (thousands)‡	$ 3,954	— 2	+ 5
Annual rate of deposit turnover	5.6	— 18	— 3
CISCO (pop. 4,499)			
Postal receipts*	$ 4,138	— 4	— 2
Bank debits (thousands)	$ 2,716	— 18	— 15
End-of-month deposits (thousands)‡	$ 4,121	+ 5	— 1
Annual rate of deposit turnover	8.1	— 19	— 14
CLEBURNE (pop. 15,381)			
Postal receipts*	$ 14,349	+ 16	+ 8
Building permits, less federal contracts	$ 106,200	+ 10	— 69
Bank debits (thousands)	$ 9,187	— 12	.....
End-of-months deposits (thousands)‡	$ 12,353	+ 4	.....
Annual rate of deposit turnover	9.1	— 13	.....
Employment (area)	437,500	**	+ 2
Manufacturing employment (area)	95,400	**	+ 2
Percent unemployed (area)	5.9	+ 2	+ 44
COPPERAS COVE (pop. 4,567)			
Postal receipts*	$ 2,198	+ 12	+ 25
Bank debits (thousands)	$ 802	+ 8	+ 68
End-of-month deposits (thousands)‡	$ 747	— 3	+ 43
Annual rate of deposit turnover	12.7	+ 9	+ 10

City and item	Feb 1961	Percent change: Feb 1961 from Jan 1961	Percent change: Feb 1961 from Feb 1960
CORPUS CHRISTI (pop. 167,690)			
Retail sales	— 4†	— 13	— 24
Apparel stores	— 18†	— 28	— 11
Automotive stores	**†	— 11	— 30
Lumber, building material, and hardware stores	— 1†	+ 8	— 28
Postal receipts*	$ 167,236	+ 4	+ 5
Building permits, less federal contracts	$ 1,133,341	— 28	+ 14
Bank debits (thousands)	$ 180,655	— 7	+ 1
End-of-month deposits (thousands)‡	$ 106,286	— 2	— 4
Annual rate of deposit turnover	20.2	— 6	+ 4
Employment (area)	62,900	+ 1	— 3
Manufacturing employment (area)	8,530	+ 1	+ 1
Percent unemployed (area)	8.6	— 2	+ 9
CORSICANA (pop. 20,344)			
Postal receipts*	$ 29,389	+ 72	+130
Building permits, less federal contracts	$ 7,350	— 88	— 98
Bank debits (thousands)	$ 14,492	— 21	— 9
End-of-month deposits (thousands)‡	$ 19,652	— 3	+ 1
Annual rate of deposit turnover	8.8	— 19	— 9
DALLAS (pop. 679,684)			
Retail sales	— 4†	— 3	— 8
Apparel stores	— 20†	— 14	+ 3
Automotive stores	+ 4†	+ 3	— 20
Eating and drinking places	— 6†	+ 3	+ 1
Florists	**†	+ 5	— 14
Food stores	— 8†	— 9	— 4
Furniture and household appliance stores	— 9†	**	— 17
Jewelry stores	.....	+ 12	— 7
Lumber, building material, and hardware stores	+ 4†	+ 8	— 6
Office, Store, and School Supply dealers	— 4†	— 3	— 2
Postal receipts*	$ 2,241,956	+ 1	+ 4
Building permits, less federal contracts	$13,047,217	— 35	+ 19
Bank debits (thousands)	$ 2,749,745	— 16	+ 4
End-of-month deposits (thousands)‡	$ 1,088,644	— 7	— 4
Annual rate of deposit turnover	29.3	— 6	+ 4
Employment (area)	437,500	**	+ 2
Manufacturing employment (area)	95,400	**	+ 2
Percent unemployed (area)	5.9	+ 2	+ 44
DEL RIO (pop. 18,612)			
Retail sales			
Automotive stores	**†	— 6	— 4
Lumber, building material, and hardware stores	— 1†	+ 10	— 17
Postal receipts*	$ 10,719	— 8	— 8
Building permits, less federal contracts	$ 220,675	+ 70	.....
Bank debits (thousands)	$ 8,524	— 9	— 8
End-of-month deposits (thousands)‡	$ 12,306	— 1	**
Annual rate of deposit turnover	8.3	— 7	— 7
DENISON (pop. 22,748)			
Retail sales	— 4†	— 9	— 29
Automotive stores	**†	— 15	— 42
Drug stores	— 4†	+ 7	— 8
Postal receipts*	$ 17,897	+ 1	+ 2
Building permits, less federal contracts	$ 201,166	+118	— 55
Bank debits (thousands)	$ 16,539	— 5	— 2
End-of-month deposits (thousands)‡	$ 14,214	+ 2	+ 1
Annual rate of deposit turnover	14.1	— 3	+ 3
DONNA (pop. 7,522)			
Postal receipts*	$ 3,331	— 9	.....
Building permits, less federal contracts	$ 20,250	— 46	+270
Bank debits (thousands)	$ 2,575	+ 14	— 4
End-of-month deposits (thousands)‡	$ 2,536	— 2	— 12
Annual rate of deposit turnover	12.1	+ 21	+ 5
DENTON (pop. 26,844)			
Retail sales	— 4†	— 11	— 43
Automotive stores	**†	— 26	— 66
Drug stores	— 4†	+ 2	— 17
Postal receipts*	$ 26,829	— 16	— 3
Building permits, less federal contracts	$ 1,112,650	+125	+533
Bank debits (thousands)	$ 16,994	— 9	+ 3
End-of-month deposits (thousands)‡	$ 19,198	+ 2	+ 2
Annual rate of deposit turnover	10.7	— 9	.....
Employment (area)	437,500	**	+ 2
Manufacturing employment (area)	95,400	**	+ 2
Percent unemployed (area)	5.9	+ 2	+ 44
EDINBURG (pop. 18,706)			
Postal receipts*	$ 10,114	— 10	— 8
Building permits less federal contracts	$ 110,977	+ 97	— 9
Bank debits (thousands)	$ 13,195	— 20	+ 4
End-of-month deposits (thousands)‡	$ 8,713	— 2	— 11
Annual rate of deposit turnover	18.0	— 22	+ 13
EDNA (pop. 5,038)			
Retail sales	— 4†	— 13	— 20
Food stores	— 5†	+ 3	+ 2
Lumber, building material, and hardware stores	— 1†	+ 1	— 13
Postal receipts*	$ 5,625	+ 5	+ 13
Building permits, less federal contracts	$ 16,590	— 74	+177
EL PASO (pop. 276,687)			
Retail sales	— 4†	**	— 9
Automotive stores	**†	+ 59	— 8
General merchandise stores	— 10†	— 2	— 12
Postal receipts*	$ 270,488	— 2	+ 4
Building permits, less federal contracts	$10,895,771	+ 65	+216
Bank debits (thousands)	$ 293,574	— 19	— 13
End-of-month deposits (thousands)‡	$ 196,435	+ 12	+ 10
Annual rate of deposit turnover	19.0	— 25	— 18
Employment (area)	90,400	— 1	+ 1
Manufacturing employment (area)	13,660	— 1	— 4
Percent unemployed (area)	6.3	+ 5	+ 7
FORT WORTH (pop. 356,268)			
Retail sales	— 5†	— 3	**
Apparel stores	— 22†	— 32	— 18
Automotive stores	+ 7†	— 1	— 14
Drug stores	— 6†	— 2	— 14
Eating and drinking places	— 6†	**	**
Food stores	— 6†	— 6	+ 9
Furniture and household appliance stores	— 7†	+ 7	— 20
Gasoline and service stations	— 4†	**	+ 2
General merchandise stores	— 9†	— 4	+ 13
Lumber, building material, and hardware stores	— 4†	+ 2	— 15
Postal receipts*	$ 742,466	+ 5	+ 11
Building permits, less federal contracts	$ 3,041,582	+ 45	— 12
Bank debits (thousands)	$ 703,725	— 16	— 5
End-of-month deposits (thousands)‡	$ 374,303	**	+ 3
Annual rate of deposit turnover	22.6	— 12	— 7
Employment (area)	209,200	**	+ 1
Manufacturing employment (area)	53,225	— 1	**
Percent unemployed (area)	6.6	+ 8	+ 20
FREDERICKSBURG (pop. 4,629)			
Retail sales	— 4†	+ 2	+ 16
Food stores	— 5†	— 9	— 8
Postal receipts*	$ 4,819	— 6	+ 11
Building permits, less federal contracts	$ 98,850	+ 63	+107
Bank debits (thousands)	$ 5,683	— 9	+ 2
End-of-month deposits (thousands)‡	$ 7,513	— 1	— 8
Annual rate of deposit turnover	9.0	— 8	+ 13

City and item	Feb 1961	Percent change: Feb 1961 from Jan 1961	Percent change: Feb 1961 from Feb 1960
GAINESVILLE (pop. 13,083)			
Retail sales			
Apparel stores	— 18†	— 34	+ 4
Postal receipts* $	11,792	— 2	— 12
Building permits, less federal contracts $	33,100	— 65	— 54
GALVESTON (pop. 67,175)			
Retail sales	— 4†	— 9	— 2
Apparel stores	— 18†	— 12	— 5
Automotive stores	**†	+ 33	+ 11
Food stores	— 5†	— 2	**
Furniture and household appliance stores	— 9†	— 41	— 20
Lumber, building material, and hardware stores	— 1†	+ 30	+ 35
Postal receipts* $	85,660	— 6	— 1
Building permits, less federal contracts $	273,118	**	+ 56
Bank debits (thousands) $	83,252	— 10	— 9
End-of-month deposits (thousands)‡ $	63,100	+ 3	— 4
Annual rate of deposit turnover	16.1	— 12	— 4
Employment (area)	53,000	**	+ 4
Manufacturing employment (area)	10,650	— 1	— 3
Percent unemployed (area)	6.4	+ 33	+ 5
GARLAND (pop. 38,501)			
Retail sales			
Automotive stores	**†	— 7	— 24
Postal receipts* $	27,289	— 23	+ 11
Building permits, less federal contracts $	1,071,284	— 10	+138
Bank debits (thousands) $	21,069	— 16	— 4
End-of-month deposits (thousands)‡ $	15,664	**	+ 28
Annual rate of deposit turnover	16.1	— 14	— 17
Employment (area)	437,500	**	+ 2
Manufacturing employment (area)	95,400	**	+ 2
Percent unemployed (area)	5.9	+ 2	+ 44
GIDDINGS (pop. 2,821)			
Postal receipts* $	3,910	+ 15	+ 7
Building permits, less federal contracts $	23,675	.....	+ 66
Bank debits (thousands) $	2,314	— 9	+ 7
End-of-month deposits (thousands)‡ $	3,820	+ 1	+ 2
Annual rate of deposit turnover	7.3	— 8	+ 7
GILMER (pop. 4,312)			
Retail sales			
Lumber, building material, and hardware stores	— 1†	+ 11	+ 41
Postal receipts* $	4,100	+ 28	— 12
Building permits, less federal contracts $	55,000	+482	+224
GLADEWATER (pop. 5,742)			
Postal receipts* $	5,463	— 9	— 3
Building permits, less federal contracts $	209,300	+1663	.....
Bank debits (thousands) $	2,921	— 12	— 2
End-of-month deposits (thousands)‡ $	5,054	+ 12	+ 29
Annual rate of deposit turnover	7.3	— 19	— 19
Employment (area)	28,100	**	**
Manufacturing employment (area)	5,490	+ 1	+ 9
Percent unemployed (area)	5.5	— 2	+ 34
GOLDTHWAITE (pop. 1,383)			
Postal receipts* $	1,846	+ 3	+ 27
Bank debits (thousands) $	3,599	+ 7	+ 54
End-of-month deposits (thousands)‡ $	3,309	— 7	— 5
Annual rate of deposit turnover	12.5	+ 11	+ 58
GRAND PRAIRIE (pop. 30,386)			
Postal receipts* $	21,492	+ 6	**
Building permits, less federal contracts $	1,062,635	+303	+200
Bank debits (thousands) $	13,299	— 21	.....
End-of-month deposits (thousands)‡ $	12,426	+ 40	.....
Annual rate of deposit turnover	15.0	— 29	.....
Employment (area)	437,500	**	+ 2
Manufacturing employment (area)	95,400	**	+ 2
Percent unemployed (area)	5.9	+ 2	+ 44
GREENVILLE (pop. 19,087)			
Retail sales	— 4†	+ 6	— 26
Apparel stores	— 18†	— 17	+ 4
Drug stores	— 4†	— 3	— 6
Lumber, building material, and hardware stores	— 1†	+ 17	— 54
Postal receipts* $	20,418	+ 7	+ 4
Building permits, less federal contracts $	178,587	— 9	+ 47
Bank debits (thousands) $	12,192	— 20	— 17
End-of-month deposits (thousands)‡ $	15,711	— 7	— 2
Annual rate of deposit turnover	9.0	— 17	— 18
HARLINGEN (pop. 41,207)			
Retail sales	— 4†	+ 2	— 20
Automotive stores	**†	— 8	— 30
Furniture and household appliance stores	— 9†	+ 21	— 2
Postal receipts* $	29,293	— 17	— 17
Building permits, less federal contracts $	330,385	— 2	— 31
Bank debits (thousands) $	34,296	— 14	— 5
End-of-month deposits (thousands)‡ $	27,001	**	+ 4
Annual rate of deposit turnover	15.3	— 15	— 8
HENDERSON (pop. 9,666)			
Retail sales	— 4†	— 10	— 8
Apparel stores	— 18†	— 17	— 6
Food stores	— 5†	+ 4	+ 4
Postal receipts* $	7,946	— 22	— 11
Building permits, less federal contracts $	32,800	— 83	— 83
HEREFORD (pop. 7,652)			
Postal receipts* $	7,506	— 11	+ 3
Building permits, less federal contracts $	59,930	— 52	— 40
Bank debits (thousands) $	11,657	— 20	+ 28
End-of-month deposits (thousands)‡ $	11,489	— 6	+ 2
Annual rate of deposit turnover	11.8	— 19	+ 23
HOUSTON (pop. 938,219)			
Retail sales	— 4†	— 5	— 6
Apparel stores	— 18†	— 4	+ 6
Automotive stores	+ 2†	+ 2	— 20
Drug stores	— 6†	— 7	— 24
Eating and drinking places	— 3†	— 7	— 9
Food stores	— 2†	— 7	**
Furniture and household appliance stores	— 1†	— 19	— 18
Gasoline and service stations	— 3†	+ 22	+ 20
General merchandise stores	— 7†	— 14	— 7
Liquor stores	+ 5†	— 8	+ 2
Lumber, building material, and hardware stores	— 4†	— 11	+ 4
Other retail stores	— 3†	— 8	— 9
Postal receipts* $	1,555,256	**	+ 3
Building permits, less federal contracts $	13,813,932	— 9	— 16
Bank debits (thousands) $	2,364,494	— 14	— 7
End-of-month deposits (thousands)‡ $	1,310,782	**	+ 4
Annual rate of deposit turnover	21.7	— 12	— 9
Employment (area)	509,100	**	+ 4
Manufacturing employment (area)	93,450	**	— 1
Percent unemployed (area)	5.5	— 5	+ 17
IRVING (pop. 45,985)			
Postal receipts* $	21,877	— 14	+ 7
Building permits, less federal contracts $	477,559	— 72	— 59
Employment (area)	437,500	**	+ 2
Manufacturing employment (area)	95,400	**	+ 2
Percent unemployed (area)	5.9	+ 2	+ 44
JACKSONVILLE (pop. 9,590)			
Postal receipts* $	12,766	— 30	— 24
Building permits, less federal contracts $	52,200	+ 8	— 36
Bank debits (thousands) $	9,061	— 16	— 7
End-of-month deposits (thousands)‡ $	8,641	— 1	+ 1
Annual rate of deposit turnover	12.5	— 13	— 7

City and item	Feb 1961	Percent change: Feb 1961 from Jan 1961	Percent change: Feb 1961 from Feb 1960
JASPER (pop. 4,889)			
Retail sales	— 4†	— 1	+ 2
Automotive stores	**†	**	— 4
Postal receipts* $	7,418	+ 14	+ 8
Building permits, less federal contracts $	9,650	— 70	.....
Bank debits (thousands) $	6,754	— 19	— 10
End-of-month deposits (thousands)‡ $	8,844	+ 2	+ 2
Annual rate of deposit turnover	9.3	— 16	— 12
KILGORE (pop. 10,092)			
Postal receipts* $	10,719	— 10	— 10
Building permits, less federal contracts $	118,350	+ 15	+248
Bank debits (thousands) $	10,705	— 12	— 9
End-of-month deposits (thousands)‡ $	13,345	— 1	— 11
Annual rate of deposit turnover	9.6	— 10	+ 2
Employment (area)	28,100	**	**
Manufacturing employment (area)	5,490	+ 1	+ 9
Percent unemployed (area)	5.5	— 2	+ 34
KILLEEN (pop. 23,377)			
Postal receipts* $	29,428	+ 11	+ 16
Building permits, less federal contracts $	224,281	+ 10	+ 25
Bank debits (thousands) $	8,772	— 5	— 6
End-of-month deposits (thousands)‡ $	8,111	**	+ 11
Annual rate of deposit turnover	12.9	— 9	— 18
KINGSVILLE (pop. 25,297)			
Retail sales			
Lumber, building material, and hardware stores	— 1†	+ 13	— 11
Postal receipts* $	13,425	+ 4	— 6
Building permits, less federal contracts $	111,850	— 86	— 63
Bank debits (thousands) $	10,458	+ 8	+ 9
End-of-month deposits (thousands)‡ $	12,474	— 7	+ 1
Annual rate of deposit turnover	9.7	+ 15	+ 2
LA FERIA (pop. 3,047)			
Postal receipts* $	2,343	+ 12	+ 4
Building permits, less federal contracts $	10,652	+868	— 16
Bank debits (thousands) $	1,456	+ 13	.....
End-of-month deposits (thousands)‡ $	1,353	+ 4	.....
Annual rate of deposit turnover	13.2	+ 13	.....
LA MARQUE (pop. 13,969)			
Postal receipts* $	7,862	— 4	+ 6
Building permits, less federal contracts $	72,298	+399	— 22
Bank debits (thousands) $	8,082	+ 11	+ 6
End-of-month deposits (thousands)‡ $	5,757	— 4	— 7
Annual rate of deposit turnover	16.5	+ 6	+ 10
Employment (area)	53,000	**	+ 4
Manufacturing employment (area)	10,650	— 1	— 3
Percent unemployed (area)	6.4	+ 33	+ 5
LAMESA (pop. 12,438)			
Retail sales			
Automotive stores	**†	— 3	— 32
Drug stores	— 4†	— 10	— 23
Postal receipts* $	13,557	+ 33	+ 24
Building permits, less federal contracts $	93,000	— 75	+ 10
Bank debits (thousands) $	16,475	— 46	+ 17
End-of-month deposits (thousands)‡ $	18,421	— 10	+ 1
Annual rate of deposit turnover	10.1	— 45	+ 15
LOCKHART (pop. 6,084)			
Retail sales			
Apparel stores	— 18†	— 21	— 4
Automotive stores	**†	— 11	— 38
Postal receipts* $	4,959	+ 7	+ 43
Building permits, less federal contracts $	4,900	+123	— 97
Bank debits (thousands) $	3,413	— 18	— 13
End-of-month deposits (thousands)‡ $	4,992	— 3	— 5
Annual rate of deposit turnover	8.1	— 16	— 7
LAMPASAS (pop. 5,061)			
Postal receipts* $	3,861	— 18	— 7
Building permits, less federal contracts $	14,000	.....	— 90
Bank debits (thousands) $	5,726	— 10	+ 11
End-of-month deposits (thousands)‡ $	6,337	— 5	+ 2
Annual rate of deposit turnover	10.6	— 8	+ 8
LAREDO (pop. 60,678)			
Postal receipts* $	31,478	— 3	+ 12
Building permits, less federal contracts $	298,720	+120	+ 84
Bank debits (thousands) $	24,931	— 13	— 9
End-of-month deposits (thousands)‡ $	22,056	+ 2	— 5
Annual rate of deposit turnover	13.7	— 13	— 4
LLANO (pop. 2,656)			
Postal receipts* $	2,262	+ 11	+ 11
Bank debits (thousands) $	2,468	— 17	+ 2
End-of-month deposits (thousands)‡ $	3,558	— 6	— 1
Annual rate of deposit turnover	8.1	— 12	+ 4
LONGVIEW (pop. 40,050)			
Retail sales	— 4†	+ 9	**
Lumber, building material, and hardware stores	— 1†	— 3	+ 5
Postal receipts* $	46,328	— 1	+ 17
Building permits, less federal contracts $	467,400	— 55	— 54
Bank debits (thousands) $	40,081	— 13	+ 2
End-of-month deposits (thousands)‡ $	34,186	+ 1	— 5
Annual rate of deposit turnover	14.1	— 11	+ 6
Employment (area)	28,100	**	**
Manufacturing employment (area)	5,490	+ 1	+ 9
Percent unemployed (area)	5.5	— 2	+ 34
LOWER RIO GRANDE VALLEY (pop. 352,086) (Cameron, Willacy, and Hidalgo Counties)			
Retail sales	— 4†	**	— 16
Apparel stores	— 18†	— 15	**
Automotive stores	**†	**	— 28
Drug stores	— 4†	— 1	**
Food stores	— 5†	— 4	— 1
Furniture and household appliance stores	— 9†	— 6	— 21
Gasoline and service stations	— 4†	— 3	— 4
General merchandise stores	— 10†	— 4	— 2
Lumber, building material, and hardware stores	— 1†	+ 10	+ 1
Office, store, and school supply dealers	.....	— 6	— 11
Postal receipts*	.....	— 9	— 3
Building permits, less federal contracts	.....	— 54	— 32
Bank debits (thousands)	.....	— 9	— 3
End-of-month deposits (thousands)‡	.....	+ 2	+ 3
Annual rate of deposit turnover	14.5	— 10	— 5
LOS FRESNOS (pop. 1,289)			
Postal receipts* $	809	— 36	+ 2
Building permits, less federal contracts $	3,000	— 25	— 73
Bank debits (thousands) $	949	— 9	— 19
End-of-month deposits (thousands)‡ $	1,129	— 8	— 20
Annual rate of deposit turnover	9.7	**	+ 1
LUBBOCK (pop. 128,691)			
Retail sales	— 4†	— 22	— 17
Automotive stores	**†	— 21	— 18
Furniture and household appliance stores	— 9†	— 19	— 11
Postal receipts* $	167,757	— 3	+ 25
Building permits, less federal contracts $	4,179,178	+ 59	+ 25
Bank debits (thousands) $	208,673	— 30	— 3
End-of-month deposits (thousands)‡ $	116,288	— 7	— 4
Annual rate of deposit turnover	20.8	— 27	+ 1
Employment (area)	49,600	— 1	— 8
Manufacturing employment (area)	5,370	— 1	— 3
Percent unemployed (area)	4.9	+ 4	+ 40

City and item	Feb 1961	Percent change: Feb 1961 from Jan 1961	Percent change: Feb 1961 from Feb 1960
LUFKIN (pop. 17,641)			
Retail stores			
Automotive stores	**†	+ 2	— 19
Food stores	— 5†	+ 2	+ 5
Postal receipts*	$ 20,664	— 1	— 5
Building permits, less federal contracts	$ 310,800	+ 58	— 8
Bank debits (thousands)	$ 19,972	— 19	— 12
End-of-month deposits (thousands)‡	$ 26,248	+ 4	+ 13
Annual rate of deposit turnover	9.3	— 17	— 19
McALLEN (pop. 32,728)			
Retail sales	— 4†	— 4	— 24
Apparel stores	— 18†	— 17	+ 3
Automotive stores	**†	— 2	— 42
Postal receipts*	$ 26,458	— 10	— 1
Building permits, less federal contracts	$ 248,342	— 29	— 27
Bank debits (thousands)	$ 27,183	— 17	**
End-of-month deposits (thousands)‡	$ 21,384	+ 6	— 3
Annual rate of deposit turnover	15.7	— 9	**
McKINNEY (pop. 13,763)			
Postal receipts*	$ 9,783	+ 4	+ 81
Building permits, less federal contracts	$ 192,485	+ 27	+175
Bank debits (thousands)	$ 8,115	— 8	— 11
End-of-month deposits (thousands)‡	$ 11,913	— 3	— 6
Annual rate of deposit turnover	8.0	— 7	— 7
MARSHALL (pop. 23,846)			
Retail sales	— 4†	— 8	**
Apparel stores	— 18†	— 18	— 3
Postal receipts*	$ 22,611	— 13	+ 5
Building permits, less federal contracts	$ 170,231	— 39	+ 23
Bank debits (thousands)	$ 15,596	— 14	— 5
End-of-month deposits (thousands)‡	$ 19,757	+ 1	— 8
Annual rate of deposit turnover	9.5	— 13	— 1
MERCEDES (pop. 10,943)			
Postal receipts*	$ 4,979	+ 12	+ 5
Building permits, less federal contracts	$ 19,650	— 24	— 17
Bank debits (thousands)	$ 5,752	+ 8	— 21
End-of-month deposits (thousands)‡	$ 3,947	+ 1	— 5
Annual rate of deposit turnover	17.6	+ 5	— 10
MESQUITE (pop. 27,526)			
Postal receipts*	$ 9,506	+ 8	+ 21
Building permits, less federal contracts	$ 3,140,294	+735	+168
Bank debits (thousands)	$ 4,749	— 17	— 13
End-of-month deposits (thousands)‡	$ 4,526	— 8	— 18
Annual rate of deposit turnover	12.1	— 10	— 9
Employment (area)	437,500	**	+ 2
Manufacturing employment (area)	95,400	**	+ 2
Percent unemployed (area)	5.9	+ 2	+ 44
MIDLAND (pop. 62,625)			
Retail sales			
Drug stores	— 4†	+ 1	— 6
Postal receipts	$ 75,868	— 2	— 5
Building permits, less federal contracts	$ 1,709,100	+ 37	— 11
Employment (area)	52,600	**	.....
Manufacturing employment (area)	2,270	— 1	.....
Percent unemployed (area)	4.8	+ 4	.....
MINERAL WELLS (pop. 11,053)			
Retail sales	— 4†	— 4	— 3
Automotive stores	**†	+ 2	— 3
Postal receipts*	$ 11,477	— 4	+ 5
Building permits, less federal contracts	$ 31,100	+ 73	+741
MISSION (pop. 14,081)			
Postal receipts*	$ 6,997	— 21	— 9
Building permits, less federal contracts	$ 137,110	+ 89	+105
Bank debits (thousands)	$ 10,410	— 7	— 14
End-of-month deposits (thousands)‡	$ 9,377	+ 2	— 16
Annual rate of deposit turnover	13.5	— 7	— 2
MONAHANS (pop. 8,567)			
Postal receipts*	$ 7,710	— 6	+ 2
Building permits, less federal contracts	$ 48,310	+ 29	— 72
Bank debits (thousands)	$ 8,818	— 14	— 8
End-of-month deposits (thousands)‡	$ 7,759	— 4	— 3
Annual rate of deposit turnover	13.3	— 12	— 6
MUENSTER (pop. 1,190)			
Retail stores			
Automotive stores	**†	+ 8	— 15
Postal receipts*	$ 1,741	+ 84	+ 21
Building permits, less federal contracts	$ 2,500	+285	— 90
Bank debits (thousands)	$ 1,322	— 27	— 25
End-of-month deposits (thousands)‡	$ 1,775	— 6	— 2
Annual rate of deposit turnover	8.6	— 26	— 25
NACOGDOCHES (pop. 12,674)			
Retail stores			
Apparel stores	— 18†	— 8	— 13
Postal receipts*	$ 14,757	+ 15	+ 10
Building permits, less federal contracts	$ 650,902	+1469	+2835
Bank debits (thousands)	$ 12,907	— 9	— 8
End-of-month deposits (thousands)‡	$ 15,307	+ 3	+ 7
Annual rate of deposit turnover	10.2	— 10	— 9
NEW BRAUNFELS (pop. 15,631)			
Postal receipts*	$ 17,779	— 11	+ 6
Building permits, less federal contracts	$ 108,125	— 57	— 22
Bank debits (thousands)	$ 9,420	— 15	— 7
End-of-month deposits (thousands)‡	$ 10,094	— 4	— 8
Annual rate of deposit turnover	11.0	— 12	— 1
ODESSA (pop. 80,338)			
Retail sales			
Furniture and household appliance stores	— 9†	— 28	— 21
Postal receipts*	$ 71,150	+ 10	+ 9
Building permits, less federal contracts	$ 1,352,052	+100	— 6
Bank debits (thousands)	$ 66,292	— 7	+ 3
End-of-month deposits (thousands)‡	$ 66,503	+ 1	+ 14
Annual rate of deposit turnover	12.0	— 2	+ 4
Employment (area)	52,600	**	.....
Manufacturing employment (area)	2,270	— 1	.....
Percent unemployed (area)	4.8	+ 4	.....
ORANGE (pop. 25,605)			
Retail sales			
Apparel stores	— 18†	— 6	— 7
Automotive stores	**†	+ 21	— 13
Postal receipts*	$ 23,167	— 3	+ 13
Building permits, less federal contracts	$ 183,183	— 34	— 26
Bank debits (thousands)	$ 24,430	+ 2	+ 10
End-of-month deposits (thousands)‡	$ 22,129	**	+ 8
Annual rate of deposit turnover	13.2	+ 2	+ 3
Employment (area)	105,700	**	+ 3
Manufacturing employment (area)	33,580	**	+ 3
Percent unemployed (area)	8.7	— 4	— 10
PAMPA (pop. 24,664)			
Retail sales	— 4†	— 2	— 19
Automotive stores	**†	+ 11	+ 3
Eating and drinking places	— 5†	— 21	**
Food stores	— 5†	— 11	— 9
Lumber, building material, and hardware stores	— 1†	— 13	— 69
Postal receipts*	$ 22,840	— 3	— 4
Building permits, less federal contracts	$ 108,524	.....	— 66
Bank debits (thousands)	$ 23,085	— 7	+ 7
End-of-month deposits (thousands)‡	$ 22,405	— 3	— 8
Annual rate of deposit turnover	12.1	— 7	+ 13

City and item	Feb 1961	Percent change: Feb 1961 from Jan 1961	Percent change: Feb 1961 from Feb 1960
PARIS (pop. 20,977)			
Retail sales	— 4†	— 8	— 13
Automotive stores	**†	— 3	— 14
Food stores	— 5†	— 8	+ 1
Lumber, building material, and hardware stores	— 1†	— 27	— 13
Postal receipts* $	17,429	— 16	— 11
Building permits, less federal contracts $	99,621	— 13	.....
Bank debits (thousands) $	14,053	— 13	— 8
End-of-month deposits (thousands)‡ $	13,335	— 7	— 3
Annual rate of deposit turnover	11.5	— 6	— 12
PASADENA (pop. 58,737)			
Postal receipts* $	34,107	+ 4	+ 4
Building permits, less federal contracts $	1,026,685	— 52	+ 42
Bank debits (thousands) $	37,373	**	+ 7
End-of-month deposits (thousands)‡ $	21,602	+ 1	— 4
Annual rate of deposit turnover	20.8	+ 5	+ 9
Employment (area)	509,100	**	+ 4
Manufacturing employment (area)	98,450	**	— 1
Percent unemployed (area)	5.5	— 5	+ 17
PHARR (pop. 14,106)			
Postal receipts* $	6,566	+ 11	+ 19
Building permits, less federal contracts $	70,755	— 58	+ 61
Bank debits (thousands) $	4,460	+ 5	— 4
End-of-month deposits (thousands)‡ $	4,591	— 8	+ 1
Annual rate of deposit turnover	11.2	**	— 6
PLAINVIEW (pop. 18,735)			
Retail sales			
Apparel stores	— 18†	— 24	+ 3
Automotive stores	**†	— 30	— 5
Postal receipts* $	18,268	— 20	+ 4
Building permits, less federal contracts $	173,000	— 19	— 52
Bank debits (thousands) $	34,283	— 35	+ 16
End-of-month deposits (thousands)‡ $	26,672	— 8	— 2
Annual rate of deposit turnover	14.8	— 34	+ 17
PORT ARTHUR (pop. 66,676)			
Retail sales	— 4†	— 5	+ 5
Automotive stores	**†	— 3	+ 14
Food stores	— 5†	— 3	+ 1
Furniture and household appliance stores	— 9†	— 7	— 3
Lumber, building material, and hardware stores	— 1†	+ 1	+ 32
Postal receipts* $	48,981	+ 15	— 4
Building permits, less federal contracts $	511,791	— 13	— 69
Bank debits (thousands) $	63,449	+ 1	+ 7
End-of-month deposits (thousands)‡ $	43,355	— 4	— 1
Annual rate of deposit turnover	17.3	— 1	+ 7
Employment (area)	105,700	**	+ 3
Manufacturing employment (area)	33,580	**	+ 3
Percent unemployed (area)	8.7	— 4	— 10
PORT ISABEL (pop. 3,575)			
Postal receipts* $	2,335	+ 20	+ 6
Building permits, less federal contracts $	2,665	— 66	— 62
Bank debits (thousands) $	482	**	.....
End-of-month deposits (thousands)‡ $	620	+ 13	.....
Annual rate of deposit turnover	9.9	— 8	.....
RAYMONDVILLE (pop. 9,385)			
Retail sales			
Lumber, building material, and hardware stores	— 1†	— 9	+ 18
Postal receipts* $	5,295	— 8	— 12
Building permits, less federal contracts $	5,300	+ 43	— 75
Bank debits (thousands) $	5,395	— 5	— 20
End-of-month deposits (thousands)‡ $	7,378	— 3	— 8
Annual rate of deposit turnover	8.7	— 2	— 11
RICHARDSON (pop. 16,810)			
Postal receipts* $	21,205	**	+ 29
Building permits, less federal contracts $	879,733	— 64	— 43
Bank debits (thousands) $	7,706	— 31	+ 10
End-of-month deposits (thousands)‡ $	5,326	— 8	+ 3
Annual rate of deposit turnover	16.6	— 20	— 1
Employment (area)	437,500	**	+ 2
Manufacturing employment (area)	94,400	**	+ 2
Percent unemployed (area)	5.9	+ 2	+ 44
ROCKDALE (pop. 4,481)			
Postal receipts* $	3,830	+ 1	+ 12
Building permits, less federal contracts $	8,850	+ 67	— 80
Bank debits (thousands) $	3,437	— 7	— 11
End-of-month deposits (thousands)‡ $	5,647	— 3	+ 3
Annual rate of deposit turnover	7.2	— 6	— 14
SAN ANGELO (pop. 58,815)			
Retail sales	— 4†	— 16	— 13
Jewelry stores	.....	— 12	— 27
Postal receipts* $	71,903	+ 4	+ 12
Building permits, less federal contracts $	693,490	+ 94	+ 20
Bank debits (thousands) $	48,755	— 15	— 4
End-of-month deposits (thousands)‡ $	45,993	— 2	— 1
Annual rate of deposit turnover	12.6	— 14	— 4
Employment (area)	19,600	— 1	— 15
Manufacturing employment (area)	2,980	+ 1	— 7
Percent unemployed (area)	7.6	+ 12	+ 31
SAN ANTONIO (pop. 587,718)			
Retail sales	— 5†	— 2	— 11
Apparel stores	— 11†	— 14	— 2
Automotive stores	+ 1†	— 2	— 26
Drug stores	— 1†	— 3	— 5
Eating and drinking places	— 6†	— 6	— 6
Food stores	— 3†	— 2	— 11
Furniture and household appliance stores	— 6†	+ 21	— 2
Gasoline and service stations	— 6†	— 7	— 9
General merchandise stores	— 10†	— 3	— 7
Jewelry stores	.....	+ 12	— 5
Lumber, building material, and hardware stores	— 7†	+ 2	— 14
Postal receipts* $	681,312	+ 6	+ 9
Building permits, less federal contracts $	4,331,855	+ 12	— 16
Bank debits (thousands) $	566,711	— 10	— 2
End-of-month deposits (thousands)‡ $	374,377	— 2	+ 2
Annual rate of deposit turnover	18.0	— 9	— 5
Employment (area)	205,300	**	**
Manufacturing employment (area)	24,825	**	— 1
Percent unemployed (area)	5.4	+ 15	+ 69
SAN JUAN (pop. 4,371)			
Postal receipts* $	2,154	— 1	— 2
Building permits, less federal contracts $	10,500	— 9	— 67
Bank debits (thousands) $	1,728	— 31	— 2
End-of-month deposits (thousands)‡ $	1,800	+ 1	+ 23
Annual rate of deposit turnover	11.6	— 23	— 9
SAN MARCOS (pop. 12,713)			
Postal receipts* $	10,383	+ 12	+ 12
Building permits, less federal contracts $	43,286	— 87	+ 17
Bank debits (thousands) $	6,072	— 6	— 10
End-of-month deposits (thousands)‡ $	8,276	**	**
Annual rate of deposit turnover	8.8	— 8	— 8
SEGUIN (pop. 14,299)			
Postal receipts* $	9,553	+ 3	— 4
Building permits, less federal contracts $	346,913	+659	+585
Bank debits (thousands) $	7,971	— 29	— 3
End-of-month deposits (thousands)‡ $	13,770	**	— 2
Annual rate of deposit turnover	7.0	— 29	**

City and item	Feb 1961	Percent change: Feb 1961 from Jan 1961	Percent change: Feb 1961 from Feb 1960
SHERMAN (pop. 24,988)			
Retail sales	— 4†	— 17	— 26
Apparel stores	— 18†	— 34	+ 2
Automotive stores	**†	— 10	— 44
Furniture and household appliance stores	— 9†	— 33	— 24
General merchandise stores	— 10†	— 13	+ 6
Lumber, building material, and hardware stores	— 1†	+ 6	— 11
Postal receipts* $	26,599	— 10	— 9
Building permits, less federal contracts $	273,949	— 5	— 40
Bank debits (thousands) $	22,365	— 21	— 3
End-of-month deposits (thousands)‡ $	18,322	— 2	— 7
Annual rate of deposit turnover	14.5	— 19	+ 1
SLATON (pop. 6,568)			
Postal receipts* $	3,055	+ 44	— 3
Building permits, less federal contracts $	6,300	— 92	— 80
Bank debits (thousands) $	3,514	— 31	+ 7
End-of-month deposits (thousands)‡ $	4,418	— 9	— 10
Annual rate of deposit turnover	9.1	— 28	+ 18
Employment (area)	49,600	— 1	— 8
Manufacturing employment (area)	5,370	— 1	— 3
Percent unemployed (area)	4.9	+ 4	+ 40
SWEETWATER (pop. 13,914)			
Retail sales			
Automotive stores	**†	+ 13	— 33
Postal receipts* $	11,052	+ 9	**
Building permits, less federal contracts $	103,650	.....	+ 4
Bank debits (thousands) $	9,674	— 27	— 13
End-of-month deposits (thousands)‡ $	10,438	— 3	— 7
Annual rate of deposit turnover	10.9	— 24	— 9
TAYLOR (pop. 9,434)			
Retail sales			
Automotive stores	**†	— 10	— 38
Postal receipts* $	8,491	+ 17	+ 12
Building permits, less federal contracts $	11,485	+ 14	— 59
Bank debits (thousands) $	6,087	— 25	— 14
End-of-month deposits (thousands) $	12,347	— 2	— 4
Annual rate of deposit turnover	5.8	— 22	— 9
TEXARKANA, TEX. (pop. 30,218)			
Retail sales	— 4†	+ 5	— 4
Apparel stores	— 18†	+ 15	+ 2
Automotive stores	**†	+ 6	— 5
Furniture and household appliance stores	— 9†	+ 22	— 3
Postal receipts* $	39,814	— 28	— 12
Building permits, less federal contracts $	474,813	+264	+170
Bank debits (thousands) $	41,820	— 16	— 2
End-of-month deposits (thousands)‡ $	17,870	+ 1	+ 9
Annual rate of deposit turnover	13.3	— 15	— 11
Employment (area)	28,200	**	— 4
Manufacturing employment (area)	3,390	— 2	— 7
Percent unemployed (area)	9.1	+ 7	+ 3
TEXAS CITY (pop. 32,065)			
Retail sales			
Lumber, building material, and hardware stores	— 1†	— 7	— 7
Postal receipts* $	19,763	— 10	— 6
Building permits, less federal contracts $	490,703	+145	— 35
Bank debits (thousands) $	19,851	— 18	**
End-of-month deposits (thousands)‡ $	11,994	— 7	— 3
Annual rate of deposit turnover	19.1	— 17	— 1
Employment (area)	53,000	**	+ 4
Manufacturing employment (area)	10,650	— 1	— 3
Percent unemployed (area)	6.4	+ 33	+ 5
TEMPLE (pop. 30,419)			
Retail sales			
Apparel stores	— 18†	— 5	— 3
Drug stores	— 4†	— 1	— 8
Furniture and household appliance stores	— 9†	+ 42	+ 3
Lumber, building material, and hardware stores	— 1†	+ 56	— 3
Postal receipts* $	35,835	— 2	+ 3
Building permits, less federal contracts $	445,523	+ 19	+253
Bank debits (thousands) $	20,147	— 15	— 4
TYLER (pop. 51,230)			
Retail sales	— 4†	— 4	— 5
Automotive stores	**†	**	— 10
Florists	.....	+ 14	— 4
Postal receipts $	77,239	— 12	— 11
Building permits, less federal contracts $	302,470	— 40	— 40
Bank debits (thousands) $	77,261	— 14	— 6
End-of-month deposits (thousands)‡ $	60,600	+ 1	+ 3
Annual rate of deposit turnover	15.4	— 14	— 6
VICTORIA (pop. 33,047)			
Retail sales	— 4†	**	**
Apparel stores	— 18†	— 8	— 8
Automotive stores	**†	— 11	— 18
Food stores	— 5†	— 2	+ 6
Furniture and household appliance stores	— 9†	+ 16	— 5
Lumber, building material, and hardware stores	— 1†	+ 31	+ 37
Postal receipts* $	29,272	— 11	+ 5
Building permits, less federal contracts $	201,015	— 41	+120
Bank debits (thousands) $	47,200	— 10	— 2
End-of-month deposits (thousands)‡ $	75,253	— 1	+ 3
Annual rate of deposit turnover	7.5	— 6	— 6
WACO (pop. 97,808)			
Retail sales	— 4†	— 1	— 9
Apparel stores	— 18†	— 10	+ 13
Automotive stores	**†	+ 14	— 12
Florists	.....	+ 32	+ 4
Furniture and household appliance stores	— 9†	— 11	— 22
General merchandise stores	— 10†	— 6	+ 2
Lumber, building material, and hardware stores	— 1†	— 18	— 34
Postal receipts* $	142,620	— 3	— 3
Building permits, less federal contracts $	761,671	— 32	— 5
Bank debits (thousands) $	95,227	— 15	— 5
End-of-month deposits (thousands)‡ $	68,393	— 3	+ 2
Annual rate of deposit turnover	16.4	— 13	— 8
Employment (area)	47,250	**	— 1
Manufacturing employment (area)	9,730	— 1	— 4
Percent unemployed (area)	6.4	— 2	+ 7
WICHITA FALLS (pop. 101,724)			
Retail sales	— 4†	+ 3	— 2
Apparel stores	— 18†	— 27	+ 10
Automotive stores	**†	+ 9	— 16
Drug stores	— 4†	— 4	— 8
Eating and drinking places	— 5†	— 10	— 30
Furniture and household appliance stores	— 9†	— 14	+ 12
Lumber, building material, and hardware stores	— 1†	+ 16	+ 1
Postal receipts $	115,948	+ 2	+ 7
Building permits, less federal contracts $	1,467,685	— 10	+ 66
Bank debits (thousands) $	107,267	— 15	— 4
End-of-month deposits (thousands)‡ $	96,259	— 3	— 5
Annual rate of deposit turnover	13.2	— 11	+ 2
Employment (area)	43,100	**	+ 6
Manufacturing employment (area)	3,550	— 1	— 4
Percent unemployed (area)	5.1	+ 16	— 20

BAROMETERS OF TEXAS BUSINESS

All figures are for Texas unless otherwise indicated. All indexes are based on the average months for 1947–49, except where indicated; all are adjusted for seasonal variation, except annual indexes. Employment estimates are Texas Employment Commission data in cooperation with the Bureau of Labor Statistics. The index of Texas Business Activity is based on bank debits in 20 cities, adjusted for price level. An asterisk (*) indicates preliminary data subject to revision. Revised data are marked (r).

	February 1961	January 1961	February 1960	Year-to-date average 1961	Year-to-date average 1960
GENERAL BUSINESS ACTIVITY					
Texas business activity, index	230	230	238	230	229
Miscellaneous freight carloadings in SW Dist., index	71	73	80	72	81
Wholesale prices in U.S., unadjusted index	120.0	119.8	119.4	119.9	119.4
Consumers' prices in Houston, unadjusted index	125.1	.....	125.6	125.1	125.6
Consumer prices in U.S., unadjusted index	127.5	127.4	125.6	127.5	125.5
Income payments to individuals in U.S. (billions, at seasonally adjusted annual rate)	$ 405.9*	$ 406.6r	$ 395.7	$ 406.3	$ 395.7
Business failures (number)	64	38	41	51	40
Newspaper linage, index	158.6	166.3	176.6	162.5	176.9
TRADE					
Ratio of credit sales to net sales in department and apparel stores	72.1*	72.8*	71.9r	72.5*	72.4r
Ratio of collections to outstandings in department and apparel stores	35.3*	39.4*	37.2r	37.4*	38.3r
PRODUCTION					
Total electric power consumption, index	395*	386*	383r	391*	380r
Industrial electric power consumption, index	380*	357*	399r	369*	390r
Crude oil production, index	109.4*	109.9*	119.2r	109.7*	116.3r
Crude oil runs to stills, index	153	153	148	153	148
Gasoline consumption, index	.....	182	179	.....	178
Industrial production in U.S., index	155	155	166	155	167
Southern pine production, index	.....	62	72	.....	72
Cottonseed crushed, index	.....	141	143	.....	145
Construction authorized, index (1957–59=100)	97.3	101.3r	94.6r	99.3	93.9r
Residential building (1957–59=100)	79.9	82.8r	91.3r	81.4	92.6r
Nonresidential building (1957–59=100)	116.1	129.1r	101.6r	122.6	95.0r
Cement shipments, index	171	162	151	167	146
Cement production, index	150	141	121	146	140
Cement consumption, index	158	147	147	153	141
Average daily production per oil well	13.5	13.3	14.4	13.4	14.1
Texas industrial production—total index	170	173	173	172	173
Texas industrial production—manufacturing total index	212	215	210	214	212
Texas industrial production—durable goods, index	248	248	246	248	248
Texas industrial production—nondurable goods, index	196	200	192	198	195
Texas mineral production—index	129	132	137	131	135
AGRICULTURE					
Prices received by farmers, unadjusted index, (1910–14=100)	249	251	240	250	242
Prices paid by farmers in U.S., unadjusted index (1910–14=100)	302	301	299	302	299
Ratio of Texas farm prices received to U.S. prices paid by farmers	82	83	80	83	81
FINANCE					
Bank debits, index	276	275	284	276	273
Bank debits, U.S., index	252	246	251	249	240
Reporting member banks, Dallas Federal Reserve District:					
Loans (millions)	$ 2,992	$ 2,963	$ 2,833	$ 2,978	$ 2,846
Loans and investments (millions)	$ 4,837	$ 4,791	$ 4,429	$ 4,814	$ 4,446
Adjusted demand deposits (millions)	$ 2,716	$ 2,694	$ 2,631	$ 2,705	$ 2,639
Revenue receipts of the State Comptroller (thousands)	$ 97,928	$ 87,957	$ 91,265	$ 92,943	$ 92,492
Federal Internal Revenue collections (thousands)	$364,192	$269,624	$350,929	$316,908	$285,451
LABOR					
Total nonagricultural employment (thousands)	2,473.9*	2,480.2r	2,476.9r	2,477.1*	2,475.9r
Total manufacturing employment (thousands)	478.7*	480.0r	488.3r	479.4*	488.4r
Durable-goods employment (thousands)	225.9*	225.4r	232.1r	225.7*	232.3r
Nondurable-goods employment (thousands)	252.8*	254.6r	256.2r	253.7*	256.1r